Alberta

ENVIRONMENT

ALBERTA
SELECTED STREAMFLOW DATA
1990

Prepared By:

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INTRODUCTION

Every year the Technical Services Division of Alberta Environment carries out numerous streamflow measurements related to specific problems and projects. In the past these data have been supplied to the user and filed in the Technical Services Division Records Centre. In an effort to present these data in a more convenient form and to make them available to a greater number of users, it was decided to produce an annual summary of streamflow measurements.

This data report is one of a series to be produced with the intention that the data will be published on an annual basis.

All miscellaneous streamflow measurements carried out by the Division in 1990 are contained in this report. Included are data from currently operated stations which were formerly part of the crest gauge program, as well as data from sites in the Peace Athabasca Delta which have been operated for many years. It should be noted that data from stations which have continuous records are forwarded to the Water Resources Branch of Environment Canada to be included in their annual publication "Surface Water Data Alberta". A list of these stations is presented on page xi.

Method of Data Collection

All streamflow measurements were carried out using either the Price current meter or the Ott current meter and standard techniques which are well documented. The discharge is determined by measuring the cross-sectional area of the stream at a specific location and multiplying the area by the average velocity. The average velocity is calculated by determining the velocity at various points across the stream.

At many of the stations the short period of record and poor channel conditions made it impossible to derive a stage/discharge curve. For this reason it was decided not to include in this publication the elevation of the water at the time of the measurement. However, in most cases, the water level was taken and a rating curve has been drawn, this information is available upon request.

Presentation of Data

All the units contained in this report are metric. The number of significant figures used in presenting the data has been standardized according to guidelines set by the Water Resources Branch of Environment Canada. It should not be assumed that the measurements were made with the degree of accuracy that the number of significant figures used indicates.

For each station the following information is provided, (i) the approximate location, (ii) where applicable the type of gauge used to record the water level, (iii) the number of years the station has been operated, (iv) remarks on the quality of the stage discharge curve if applicable and (v) the name and station number. Drainage areas have been included where they are readily available.

The station numbering system adopted is the same as that used by the Water Resources Branch of Environment Canada. The first two digits identify the major drainage basin in which the station is located and the next two letters indicate the sub-basin, and the last three digits the number of the station. To avoid duplication with Environment Canada's numbers, all Alberta Environment station numbers start with a nine. The major drainage basins in Alberta are identified as follows:

(07) Mackenzie River System
(05) Saskatchewan-Nelson River System
(06) Churchill River System
(11) Missouri River System
(10) Liard River System

Categories of Hydrometric Stations

Depending on the type of data collected, the hydrometric stations operated by the Water Survey Section have been divided in to three categories. The different categories are defined as follows:

Category I. Hydrometric Recording Stations.

These are stations equipped with recording gauges and operated on a continuous basis throughout the open water period. Enough streamflow measurements are carried out to obtain a stage/discharge curve, whereby water level can be converted into an estimate of mean daily flow. As mentioned above, data of a continuous nature are usually published through the Water Resources Branch of Environment Canada.

Category II. Hydrometric non-Recording Stations.

At these stations, enough streamflow measurements are carried out to establish a reliable stage/discharge curve for the open water season. Every effort is made to obtain a good estimate of peak flow for significant storm events.

Category III. Miscellaneous Stations.

Streamflow measurements carried out at these sites are not intended to develop a stage/discharge curve. Measurements are usually carried out in answer to specific requests and are only intended to provide an estimate of flow on a particular day. There may be as few as one or two measurements per year carried out at these sites.

Accuracy of Data

All the measurements included in this report were carried out by experienced hydrometric technologists using calibrated equipment. However, the location of the measuring site was often dictated by the needs of the data users. This is important because the accuracy of an individual streamflow measurement is mainly dependent on the characteristics of the channel in which it is carried out. Under ideal conditions it is believed that a measurement can be made to within ±5% of its true value. It should also be borne in mind that these are spot measurements and they may not represent the mean flow for the day.

Further Information

This data report only contains streamflow measurements carried out in 1990. In the Technical Services Division Records Centre there are individual files for most of the stations. These files contain all the information collected over the period of record and much more detail than is contained in this brief report is available. Anyone who requires more information on any of the stations is asked to contact:

Technical Services Division
Records Centre
11th Floor, Oxbridge Place
9820 - 106 Street
Edmonton, Alberta
T5K 2J6
Phone: 427-6298

1990 SELECTED STREAMFLOW DATA

STATION NAME	STATION NUMBER	PAGE
Aetna Main Canal Below Lateral "K"	05AE911	1
Assineau Creek at Assineau	07BJ901	2
Athabasca River above Berland River	07AE908	3
Athabasca River above Horse River	07CC903	4
Athabasca River above House River	07CB907	5
Athabasca River at Smith	07BE912	6
Athabasca River Below Winter Road Crossing	07DD904	7
Bad Heart River Above Smoky River Confluence near Peoria	07GJ906	8
Battle River at Highway #21	05FA924	9
Battle River at Highway #41	05FE902	10
Battle River at Highway #53	05FA926	11
Battle River at Highway #611 East of Hobbema	05FA919	12
Battle River at Highway #611 West of Usona	05FA923	13
Battle River at Highway #850	05FA925	14
Battle River at Highway #861 near Galahad	05FC905	15
Battle River at Highway #872	05FC906	16
Battle River at Highway #897	05FE906	17
Battle River near Hardisty	05FB903	18
Bear River above Wapiti River Confluence near Grande Prairie	07GE921	19
Belly River near the Mouth	05AD921	20
Berry Creek at Cessford Road	05CH918	21

1990 SELECTED STREAMFLOW DATA

STATION NAME	STATION NUMBER	PAGE
Berry Creek below Deadfish Reservoir	05CH903	22
Berry Creek Site #1 near Hanna	05CH915	23
Berry Creek Site #2 near Hanna	05CH916	24
Berry Creek Site #3 near Hanna	05CH917	25
Big Mountain Creek above Wapiti River Confluence near Grande Prairie	07GE920	26
Big Point Channel below Divergence	07DD006	27
Bigknife Creek at Bigknife Provincial Park	05FC907	28
Bigstone Creek Site C near Pipestone	05FA928	29
Blackfoot Creek near the Sask. Boundary	05FE908	30
Bow River Development Main Canal at Drop #3	05AC902	31
Buffalo Bay Outflow near Grouard	07BF917	32
Buffalo Bay Outlet at Grouard (Causeway)	07BF910	33
Burnt Timber Creek at Forestry Trunk Road	05CA906	34
Calling River near the Mouth	07CB904	36
Camrose Creek near Camrose	05FA921	37
Canal Off Pekisko Creek at E-P Ranch	05BL918	38
Castor Creek near Castor	05FC902	39
Castor Creek near the Mouth	05FC909	40
Chain Lakes North Dam Outflow	05AB902	41
Chain Lakes South Dam Riparian Flow	05AB909	42
Chenal Des Quatre Fourches below Four Forks	07KF006	43
Connor Creek near Sangudo	07BB009	45
Deadfish Canal below Janet Reservoir	05CH919	46

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STATION NAME	STATION NUMBER	PAGE
Deadfish Pipeline Outfall below Deadfish Pumphouse	05CH920	47
Dogpound Creek near Didsbury	05CB904	48
Driftpile River at Driftpile	07BH003	49
Ells River near the Mouth	07DA017	50
Embarras River below Divergence	07DD003	51
Embarras River Breakthrough to Mamawi Lake	07KF015	52
Ethel Lake Outflow at Control Weir	06AC008	53
Fallentimber Creek at Forestry Trunk Road	05CA908	54
Falun Creek Site A near Pipestone	05FA927	56
Fletcher Channel below Divergence	07DD004	57
Foothills Creek near Pincher Creek	05AD901	58
Galwey Brook near Waterton Park	05AD904	59
Glen Lateral at Cochrane Lake Outflow	05AD925	60
Goose Island Channel below Divergence	07DD005	61
Gratton Creek near Irma	05FB904	62
Grizzly Bear Creek near the Mouth	05FE907	63
House River near the Mouth	07CB906	64
Isle Lake Outflow near Darwell	05EA920	65
James River near James River Ranger Station	05CA910	67
Kneehills Creek at Sunnyslope	05CE904	69
L.N.I.D. Monarch Branch Canal below Monarch Headgates	05AC028	70
La Biche River near Plamondon	07AC007	71
La Biche River near the Mouth	07CB905	72

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STATION NAME	STATION NUMBER	PAGE
Lac Ste. Anne Outflow near Alberta Beach	05EA919	73
Leavitt-Aetna Main Canal at Beazer Road	05AD915	75
Leavitt-Aetna Main Canal below M.V.I.D. Turnout	05AD914	76
Leavitt-Aetna Main Canal near Leavitt	05AD916	77
Leavitt Irrigation District Lateral "K"	05AE913	78
Lethbridge Northern Irrigation District Canal at Headgates	05AB032	79
Little Bow River below Vulcan Water Supply	05AC912	80
Little Bow River Upstream of Travers Reservoir Inlet	05AC916	81
Little Smoky River at Secondary #744	07GH910	82
Lobstick River near Niton	07BB911	83
Mamawi Lake Channel at Dog Camp	07KF010	85
Marsh Head Creek near the Mouth	07AE903	86
Marten Creek at Highway #63	07BG901	87
Meeting Creek near the Mouth	05FC910	88
Mountain View District Canal below Paine Lake	05AD913	89
Narrows Creek near the Mouth	07BG902	91
North Saskatchewan River at Duvernay	05ED917	92
North Saskatchewan River near Elk Point at Highway #41	05ED916	93
North Saskatchewan River near Marwayne	05EE927	94
North Saskatchewan River at Shandro Bridge	05ED918	95
North Saskatchewan River below Vermilion River	05EE928	96

1990 SELECTED STREAMFLOW DATA

STATION NAME	STATION NUMBER	PAGE
North Saskatchewan River at Waskatenau	05EC917	97
Oldman Creek near the Mouth	07AD907	98
Oldman River below L.N.I.D. Headworks	05AB918	99
Paintearth Creek near Castor (Highway #861)	05FC908	100
Pekisko Creek at E-P Ranch	05BL916	101
Pekisko Creek at Gallup Ranch	05BL920	102
Pekisko Creek below Confluence with Stimson Creek	05BL921	103
Pelican River near the Mouth	07CB903	104
Pembina River near Belvedere	07BB912	105
Pembina River at Rossington	07BC904	106
Pipestone Creek below Coal Lake	05FA920	107
Prairie River near Lake Claire	07KF014	108
Puskwaskau River above Smoky River Confluence near Peoria	07GJ907	109
Revillon Coupe at the Weir	07NA901	110
Revillon Coupe below Riviere Des Rochers	07NA004	111
Ribstone Creek near the Mouth	05FD905	112
Richardson River at the Winter Road Crossing	07DD903	113
Riviere Des Rochers below Revillon Coupe	07NA902	114
Riviere Qui Barre Creek near Riviere Qui Barre	05EA916	115
Rosebud Creek at Highway #21	05CE907	116
Ross Creek at Outlet of Elkwater Lake	05AH049	117
Saddle River Slide at Dam Site		118
Serviceberry Creek at Highway #21	05CE908	119

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STATION NAME	STATION NUMBER	PAGE
Smoky River above Confluence with Wapiti River	07GB902	120
Smoky River near Bezanson	07GJ908	121
Sounding Creek Site #1 near Hanna	05GA906	122
Sounding Creek Site #2 near Hanna	05GA907	123
Sounding Creek Site #3 near Hanna	05GA908	124
Sounding Creek Site #4 near Hanna	05GA909	125
Sounding Creek Site #5 near Hanna	05GA910	126
South Heart Reservoir Seepage Site below Spillway #1	07BF914	127
South Heart River near Mullen's Farm	07BF918	128
South Heart River Site #8 near Big Prairie Settlement	07BF905	129
Spring Creek #2 below Berland River	07AE907	130
St. Mary River below St. Mary Dam	05AE908	131
Stimson Creek at Highway #22	05BL922	132
Sturgeon River at St. Albert	05EA002	133
Tawatinaw River near Colinton	07BE907	134
Tough Creek near Beazer	05AE039	135
U.I.D. Canal Reach #1 at Station 12+344	05AD933	136
U.I.D. Lateral "A" near Headgate	05AD922	137
U.I.D. Lateral "B" near Headgate	05AD923	138
U.I.D. Main Canal below Hillspring Chute	05AD924	139
Vermilion River near the Mouth	05EE926	140
Wabamun Lake Outlet	05DE908	141

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STATION NAME	STATION NUMBER	PAGE
Wabash Creek Tributary near Westlock	07BC902	143
Waterton River below Waterton Dam at Tunnel	05AD930	144
West Castle River at Forestry Road Bridge (Site #1)	05AA915	145
West Castle River Downstream of Forestry Road Bridge (Site #2)	05AA916	146
White Earth Creek above Edwand Creek	05EC916	147
Whitehorse Creek near Cadomin	07AF910	148
Whitford Creek near Mundare	05EC907	150
Willow Creek near Granum	05AB906	151
Winagami-Girouxville Canal at Turn-Out Structure	07BF913	152
Windfall Creek near the Mouth	07AE906	153
Wolf Creek near Craigmyle	05CF902	154
Wolf Creek near Ponoka	05FA913	155

ALBERTA ENVIRONMENT RECORDING STATIONS
PUBLISHED BY ENVIRONMENT CANADA IN 1990

STATION NAME	STATION NUMBER
Aetna Creek at Highway #501	05AE912
Athabasca River above Jackfish Creek	07DD007
Athabasca River near Old Fort	07DD011
Atim Creek near Spruce Grove	05EA009
Bear Lake near Clairmont	07GE004
Bearberry Creek near Sundre	05CA011
Beddington Creek near Calgary	05BH904
Bigelow Reservoir near Wimborne	05CE901
Bow River Development Western Block Lateral A near Headgate	05AC013
Chenal Des Quatre Fourches at Quatre Fourches	07KF001
Colombine Creek near the Mouth	06AA004
Cottonwood Creek near Twin Butte	05AD903
Driedmeat Lake at Outflow	05FA020
Elbow River at Sarcee Bridge	05BJ010
Embarras River below Divergence	07DD003
Embarras River Breakthrough to Mamawi Lake	07KF015
Erith River below Hanlan Creek	07AF907
Etzikom Coulee near Nemiskam	07AF905
Fallentimber Creek near Sundre	05CA012
Foothills Creek near Pincher Creek	05AD901
Galwey Brook near Waterton Park	05AD904
Krawchuk Drainage near McLennan	07HA902

ALBERTA ENVIRONMENT RECORDING STATIONS
PUBLISHED BY ENVIRONMENT CANADA IN 1990

STATION NAME	STATION NUMBER
Lake Athabasca at Bustard Island	07MD002
Lake Athabasca at Fort Chipewyan	07MD001
Lake Claire near Outlet to Prairie River	07KF002
Lee Creek Below Confluence of East Fork	05AE904
Lethbridge Northern Irrigation District Canal Below Keho Outflow	05AC026
Lethbridge Northern Irrigation District Monarch Branch Canal Below Monarch Headgates	05AC028
Lodge Creek at Highway #41	11AB902
Mamawi Lake Channel at Old Dog Camp	07KF003
Muskeg Creek near Westerose	05FA912
Nose Creek near the Mouth	05BH901
Paddle River Reservoir near Rochfort Bridge	07BB914
Parlby Creek near Mirror	05CD902
Peace River Below Chenal Des Quatre Fourches	07KC005
Pointe-Aux-Pins Creek near Ardrossan	05EB902
Pointe-Aux-Pins Tributary #1 near Ardrossan	05EB909
Pointe-Aux-Pins Tributary #2 near Ardrossan	05EB910
Pointe-Aux-Pins Tributary #3 near Ardrossan	05EB911
Riviere Des Rochers above Slave River	07NA001
Riviere Des Rochers East of Little Rapids	07NA007
Riviere Des Rochers West of Little Rapids	07NA008

ALBERTA ENVIRONMENT RECORDING STATIONS
PUBLISHED BY ENVIRONMENT CANADA IN 1990

STATION NAME	STATION NUMBER
Romeo Creek above Romeo Lake	07BB903
Rycroft Survey #3 near Rycroft	07FD910
Squaw Coulee Diversion below Squaw Coulee Dam	05AC917
Todd Creek near Highway #22	05AA909
Tough Creek near Beazer	05AE039
Vermilion River Drainage near Holden	05EE913
Vixen Creek near Belloy	07FD921
Whitburn Drainage Project near Spirit River	07FD912
Young Drainage Project near Spirit River	07FD913

STATION NAME: AETNA MAIN CANAL BELOW LATERAL "K" NUMBER: 05AE911

LOCATION: 1.6 km East of Leavitt, 1.6 km South and 2.0 km East.
(NW 27-02-26-W4)

LATITUDE: 49^0 09' 30" LONGITUDE: 113^0 24' 00"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements except 1990.

Date	Temp ^{0}C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			4.0	1.68	0.615	1.03	
Sep 26			4.1	1.27	0.434	0.551	

STATION NAME: ASSINEAU CREEK AT ASSINEAU NUMBER: 07BJ901

LOCATION: 30 km West of Highway #63 on Highway #2, 3.2 km North of Highway #2 to townsite. (NE 32-73-8-W5)

LATITUDE: 55° 22' 19" LONGITUDE: 115° 11' 01"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 15	20.0	20.0	1.4	0.14	0.252	0.036	

STATION NAME: ATHABASCA RIVER ABOVE BERLAND RIVER NUMBER: 07AE908

LOCATION: Athabasca River, 100 m above Berland River confluence.
(NW 12-58-20-W5)

LATITUDE: 54° 00' 04" LONGITUDE: 116° 50' 51"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 15	-23.0	0.0	120.0	31.2	0.728	22.7	B, open leads d/s for 5 km.

B - Ice Conditions

STATION NAME: ATHABASCA RIVER ABOVE HORSE RIVER NUMBER: 07CC903

LOCATION: Located on Athabasca River above Horse River at the city of Fort McMurray. (SW 7-89-09-W4)

LATITUDE: 56° 41' 56" LONGITUDE: 111° 25' 49"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 13	7.0	0.0	340	315	0.381	120	B, slush, rough ice @ 15:00

B - ice conditions

STATION NAME: ATHABASCA RIVER ABOVE HOUSE RIVER NUMBER: 07CB907

LOCATION: Approximately 1 km upstream from mouth at House River.

LATITUDE: 56° 11' 37" LONGITUDE: 112° 30' 38"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 08	4.0	0.0	453	287	0.436	125	B, ice measurement @ 11:28

B - ice conditions

STATION NAME: ATHABASCA RIVER AT SMITH NUMBER: 07BE912

LOCATION: 75 m above Highway 2A bridge at Smith. (NW 23-71-1-W5)

LATITUDE: 55° 10' 06" LONGITUDE: 114° 02' 33"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 27	0.0	0.0	146	361	0.325	117[B]	Slush Free

B - ice conditions

STATION NAME: ATHABASCA RIVER BELOW WINTER ROAD CROSSING NUMBER: 07DD904

LOCATION: On the Athabasca River approximately 32 km downstream of the Embarras Store and approximately 30 air km South of Fort Chipewyan.

LATITUDE: 58° 27' LONGITUDE: 111° 11' 00"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division.
Peace Athabasca Delta Station.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jan 18	-15.0	0.0	245	1020	0.257	262	
Mar 07	6.0	0.0	242	864	0.243	210	
Mar 21	-12.0	0.0	244	1040	0.254	263	
Dec 11	-19.0	0.0	190	734	0.218	160	

STATION NAME: BAD HEART RIVER ABOVE SMOKY RIVER CONFLUENCE NEAR PEORIA NUMBER: 07GJ906

LOCATION: From Peoria, 10.5 km Southeast to mouth of creek; 24 km North-Northeast of Teepee Creek. (SW 02-76-02-W6).

LATITUDE: 55° 33' LONGITUDE: 118° 12'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 07	4.0	0.0	9.2	1.94	1.126	2.19	Flow over ice, B

B - ice conditions

STATION NAME: BATTLE RIVER AT HIGHWAY #21 NUMBER: 05FA924

LOCATION: 8.5 km West and 7.0 km South of Camrose.

LATITUDE: 52° 56' 55" LONGITUDE: 112° 57' 50"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1975 - 1990 (intermittent)

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	4.0	1.0	33.0	71.9	0.455	32.7	
May 22	21.0	15.0	24.0	13.1	0.471	6.17	
Aug 28	12.0	13.0	11.6	6.94	0.659	4.57	
Oct 09	14.0	6.0	10.3	3.69	0.602	2.22	

STATION NAME: BATTLE RIVER AT HIGHWAY #41 NUMBER: 05FE902

LOCATION: 18.0 km North of Highway #14 and Highway #41 junction, near Wainwright. (NW 29-46-6-W4)

LATITUDE: 52° 59' 45" LONGITUDE: 110° 50' 53"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1977 - 1981, 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 11	-5.0	3.0	32.0	53.8	0.701	37.7	
May 29	24.0	18.0	30.0	23.0	0.336	7.73	
Aug 29	24.0	20.0	28.0	25.4	0.431	10.7	
Oct 10	5.0	6.0	18.6	8.91	0.471	4.20	
Nov 30	-17.0	0.0	20.0	11.6	0.136	1.58	B

B - ice conditions

STATION NAME: BATTLE RIVER AT HIGHWAY #53 NUMBER: 05FA926

LOCATION: 8.0 km West of Ponoka on Highway #53. (NE 4-43-26-W4)

LATITUDE: 52° 40' 20" LONGITUDE: 113° 42' 49"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	9.0	1.0	21.1	32.8	0.588	19.3	
May 22	13.0	12.0	16.8	13.3	0.311	4.13	
Aug 27	17.0	15.0	15.0	27.2	0.124	3.37	
Oct 09	11.0	6.0		1.52	0.803	1.22	

STATION NAME: BATTLE RIVER AT HIGHWAY #611 EAST OF HOBBEMA NUMBER: 05FA919

LOCATION: 11.3 km East of Hobbema on Highway #611.

LATITUDE: 52° 48' 37" LONGITUDE: 113° 18' 52"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1970 - 1982, 1989 - 1990

STAGE DISCHARGE CURVE: None - weed affected

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	3.0	1.0	21.7	18.6	0.914	17.0	Ice free
May 22	12.0	14.0	13.4	10.8	0.371	4.01	
Aug 27	20.0	15.0	13.8	10.1	0.357	3.61	
Oct 09	17.0	5.0	13.8	9.29	0.181	1.68	

STATION NAME: BATTLE RIVER AT HIGHWAY #611 WEST OF USONA NUMBER: 05FA923

LOCATION: 10.8 km West of Usona on Highway #611.

LATITUDE: 52° 50' 22" LONGITUDE: 113° 54' 47"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None - weed affected

REMARKS: Requested by Environmental Assessment Division

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	7.0	1.0	12.7	17.8	0.482	8.58	
May 22	10.0	11.0	10.5	8.79	0.419	3.68	
Aug 27	15.0	13.0	12.7	8.65	0.310	2.68	
Oct 09	11.0	5.0	9.1	4.95	0.248	1.23	

STATION NAME: BATTLE RIVER AT HIGHWAY #850 NUMBER: 05FA925

LOCATION: From Camrose, 17.7 km East on Highway #13, and 20.6 km South.

LATITUDE: 52° 44' 41" LONGITUDE: 112° 33' 53"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None - weed affected

REMARKS: Requested by Environmental Assessment Division

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	5.0	4.0	39.0	67.3	0.434	29.2	Ice free
May 23	18.0	14.0	31.0	25.7	0.249	6.39	
Aug 28	20.0	16.0	31.0	25.3	0.310	7.85	HWM = 2 m above WL
Oct 09	13.0	7.0	15.2	6.74	0.270	1.82	

STATION NAME: BATTLE RIVER AT HIGHWAY #861 NEAR GALAHAD NUMBER: 05FC905

LOCATION: 25.8 km North of Castor.

LATITUDE: 52° 27' 01" LONGITUDE: 111° 55' 12"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None - weed affected

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	9.0	2.0	26.0	54.6	0.767	41.9	
May 28	24.0	18.0	19.5	13.7	0.431	5.90	
Aug 28	24.0	20.0	22.0	17.9	0.441	7.89	HWM = 1 m above WL
Oct 10	6.0	8.0	16.9	8.35	0.254	2.12	

STATION NAME: BATTLE RIVER AT HIGHWAY #872 **NUMBER:** 05FC906

LOCATION: 35.4 km North of Coronation.

LATITUDE: 52° 24' 10" **LONGITUDE:** 111° 24' 59"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None - weed affected

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 06	8.0[E]	2.0[E]	27.5	53.5	0.802	42.9	
May 29	20.0	17.0	25.5	16.8	0.340	5.71	
Aug 29	14.0	14.0	25.2	18.6	0.413	7.68	HWM - 1.5 m above WL
Oct 10	9.0	7.0	13.5	6.74	0.288	1.94	

STATION NAME: BATTLE RIVER AT HIGHWAY #897 **NUMBER:** 05FE906

LOCATION: 33.0 km East and 8.7 km North of Wainwright.

LATITUDE: 53° 00' 11" **LONGITUDE:** 110° 20' 25"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 10	1.0	3.0	28.0	56.2	0.742	41.7	
May 30	18.0	18.0	21.9	23.0	0.381	8.77	
Aug 30	18.0	16.0	20.4	25.6	0.449	11.5	HWM - 1.3 m above WL
Oct 11	0.0	4.0	19.7	15.7	0.265	4.16	

STATION NAME: BATTLE RIVER NEAR HARDISTY NUMBER: 05FB903

LOCATION: 3.2 km North and 2.0 km East of Hardisty.

LATITUDE: 52^0 41' 38" LONGITUDE: 111^0 14' 49"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 10	0.0	4.0	25.0	48.5	0.709	34.4	
May 29	23.0	17.0	36.0	13.5	0.539	7.27	
Aug 29	23.0	16.0	33.8	15.3	0.597	9.13	
Oct 10	9.0	7.0	31.0	5.85	0.448	2.62	

STATION NAME: BEAR RIVER ABOVE WAPITI RIVER CONFLUENCE NEAR GRANDE PRAIRIE NUMBER: 07GE921

LOCATION: From Grande Prairie city centre, 21.5 km East-southeast to mouth of creek; 15.5 km South-southwest of Bezanson. (NW 36-70-04-W6)

LATITUDE: 55° 06' LONGITUDE: 118° 28'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 27	-10.0	0.0				0.000	Trace, B

B = ice conditions

STATION NAME: BELLY RIVER AT MOON RIVER ROAD **NUMBER:** 05AD934

LOCATION: 3.2 km West of Monarch and 6.5 km South on Moon River Road to River Bank (through Moon River Estates). (SE 13-9-24-W4)

LATITUDE: 49° 43' 55" **LONGITUDE:** 113° 07' 30"

STATION CATEGORY: Recording - Fluid Gauge **DRAINAGE AREA:** 3563.6 km²

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No - Insufficient measurements

REMARKS: To be published in 1991 if curve can be drawn.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m²	m/s	m³/s	
Aug 01			55.0	15.8	0.328	4.75	
Aug 10			50.0	14.6	0.316	4.59	
Aug 23			50.0	13.8	0.420	5.80	
Sep 14			52.0	13.8	0.398	5.50	

STATION NAME: BERRY CREEK AT CESSFORD ROAD NUMBER: 05CH918

LOCATION: 11.2 km West of Cessford. (03-24-13-W4)

LATITUDE: 51° 00' 37" LONGITUDE: 111° 53' 06"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 16	25.0	22.0	3.0	0.86	0.323	0.278	Measurement at washed out culvert crossing upstream bridge

STATION NAME: BERRY CREEK BELOW DEADFISH RESERVOIR NUMBER: 05CH903

(STUDY SITE 85-1)

LOCATION: Approximately 0.3 km below reservoir dam at old campsite.

(21-23-13-W4)

LATITUDE: 50° 58' 30" LONGITUDE: 111° 45' 45"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1983, 1985, 1990

STAGE DISCHARGE CURVE: No

REMARKS: Site originally set up for channel loss study.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 30	14.0	15.0	3.2	1.03	0.806	0.830	@ 08:20 MST. Gate - 9"
May 30	15.0	15.0	3.9	1.49	0.805	1.20	@ 09:20 MST. Gate - 12"
May 30	18.0	15.0	3.0	0.73	0.733	0.535	@ 10:27 MST. Gate - 6"
Aug 16	27.0	23.0	3.7	1.07	0.541	0.581	@ 10:58 MST. Gate - 8"
Aug 16	28.0	23.0	4.0	1.77	0.621	1.10	@ 12:00 MST. Gate - 13"

STATION NAME: BERRY CREEK SITE #1 NEAR HANNA NUMBER: 05CH915

LOCATION: 24.0 km North, 14.4 km East of Hanna. (1-34-13-W4)

LATITUDE: 51° 53' 01" LONGITUDE: 111° 42' 27"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	19.0	13.0				0.0	

STATION NAME: BERRY CREEK SITE #2 NEAR HANNA NUMBER: 05CH916

LOCATION: 14.4 km North, 20.8 km East of Hanna. (35-32-12-W4)

LATITUDE: 51° 46' 53" LONGITUDE: 111° 36' 25"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	16.0	13.0	1.3	0.3	0.183	0.055	

STATION NAME: BERRY CREEK SITE #3 NEAR HANNA NUMBER: 05CH917

LOCATION: 9.6 km North, 20.8 km East of Hanna. (11-32-12-W4)

LATITUDE: 51° 44' 03" LONGITUDE: 111° 36' 25"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	15.0	13.0	5.3	0.61	0.087	0.053	

STATION NAME: BIG MOUNTAIN CREEK ABOVE WAPITI RIVER CONFLUENCE NEAR GRANDE PRAIRIE NUMBER: 07GE920

LOCATION: From Grande Prairie city centre, 15.0 km South-southeast to mouth of creek; 13.5 km East-Northeast of Grovedale. (SE 15-70-05-W6)

LATITUDE: 55° 04' LONGITUDE: 118° 40'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 27	-3.0	0.0	5.0	0.690	0.249	0.172	Estimated from spot velocities, too shallow, B

B = ice conditions

STATION NAME: BIG POINT CHANNEL BELOW DIVERGENCE NUMBER: 07DD006

LOCATION: Approximately 33 km Southeast of Fort Chipewyan. (19-109-5-W4)

LATITUDE: 58° 28' 55" LONGITUDE: 110° 48' 15"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1971 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 06	12.0	14.0	138	747	0.892	666	
Jun 28	23.0	18.0	141	800	0.938	750	
Jun 29	23.0	17.0					
Jul 12	25.0	19.0	143	840	0.983	826	
Jul 26	20.0	19.0	136	756	0.679	513	
Aug 09	15.0	18.0	136	697	0.485	338	
Aug 20	-	-	136	681	0.474	323	
Sep 18	10.0	14.0	135	627	0.349	219	

STATION NAME: BIGKNIFE CREEK AT BIGKNIFE PROVINCIAL PARK **NUMBER:** 05FC907

LOCATION: 200 m down hiking trail in far Northwest corner of Bigknife Provincial Park. (SE 3-41-16-W4)

LATITUDE: 52° 29' 38" **LONGITUDE:** 112° 13' 12"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km²

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	9.0	2.0	6.0	3.65	0.362	1.32	B
May 28	21.0	14.0	1.6	0.15	0.240	0.036	
Aug 28	22.0	19.0				<0.001	E, Backwater at bridge
Oct 10	5.0	5.0				0.001	E

B - Ice Conditions

E - Estimate

STATION NAME: BIGSTONE CREEK SITE C NEAR PIPESTONE **NUMBER:** 05FA928

LOCATION: 4 km South, 1.6 km East of Pipestone store. (NW 31-46-26-W6)

LATITUDE: 53° 00' 50" **LONGITUDE:** 113° 46' 26"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 29	8.0	2.0	6.3	2.65	0.585	1.55	B, @ 15:00; Dam u/s washing out.
Mar 30	5.0	0.0	6.3	3.26	0.834	2.72	@ 11:30 surging
Mar 31	9.0	0.0	6.4	3.95	0.824	3.23	@ 12:00 surging - near peak

B - Ice Conditions

STATION NAME: BLACKFOOT CREEK NEAR THE SASK. BOUNDARY **NUMBER: 05FE908**

LOCATION: 56.0 km East, 13.0 km North and 1.1 km East of Wainwright.
(SE 13-46-1-W4)

LATITUDE: 52° 57' 35" **LONGITUDE: 110° 00' 28"**

STATION CATEGORY: Miscellaneous **DRAINAGE AREA: N/A km²**

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 30	18.0	16.0	0.6	0.01	0.214	0.003	

STATION NAME: BOW RIVER DEVELOPMENT MAIN CANAL AT DROP #3 **NUMBER: 05AC902**

LOCATION: 6.4 km West of Enchant on Highway #526, 0.8 km South to Canal Road and 3.2 km West along Canal Road. (SW 9-14-19-W4)

LATITUDE: 50^0 09' 25" **LONGITUDE:** 112^0 32' 00"

STATION CATEGORY: Recording - Handar 560 on DACQ **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1981 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Insufficient measurements in 1990 to compute data - will be computed from DACQ readings in 1991.

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 31			36.0	56.6	0.230	13.0	

STATION NAME: BUFFALO BAY OUTFLOW NEAR GROUARD **NUMBER: 07BF917**

LOCATION: Approximately 900 m downstream of outflow from Buffalo Bay.
(SW 31-75-14-W5)

LATITUDE: 55° 32' 08" **LONGITUDE:** 116° 09' 51"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Boat measurement.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 03	9.0	9.0	69.0	89.2	0.348	31.1	

STATION NAME: BUFFALO BAY OUTLET AT GROUARD (CAUSEWAY) **NUMBER: 07BF910**

LOCATION: At causeway crossing at Grouard. (SW 31-75-14-W5)

LATITUDE: 55° 32' 21" **LONGITUDE: 116° 09' 51"**

STATION CATEGORY: Miscellaneous **DRAINAGE AREA: N/A km²**

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 15						0.000	Upstream wind

STATION NAME: BURNT TIMBER CREEK AT FORESTRY TRUNK ROAD NUMBER: 05CA906

LOCATION: Approx. 14 km Southeast of Mountain Aire Lodge on the Forestry Trunk Road. (26-30-9-W5)

LATITUDE: 51° 35' 34" LONGITUDE: 115° 10' 10"

STATION CATEGORY: Non recording DRAINAGE AREA: 318 km^2

PERIOD OF RECORD: 1958 - 1968; 1976 - 1990

STAGE DISCHARGE CURVE: Good in medium to low flows

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	8.0	0.0	20.0	2.62	0.303	0.793	B
May 09	4.0	3.0	18.2	3.91	0.507	1.98	
May 28	10.0	5.0	21.5	14.1	1.624	22.9	Surging badly, falling
May 31	17.0	4.0	21.5	13.9	1.784	24.8	Surging badly, falling
Jun 02	18.0	8.0	24.0	29.5	3.559	105	Surging badly, falling
Jun 03	18.0	6.0	24.0	21.8	2.486	54.2	Surging badly, falling
Jun 05	8.0	4.0	22.2	14.9	1.886	28.1	Surging badly, falling
Jun 12	9.0	5.0	25.8	11.2	0.973	10.9	Surging badly, falling
Jul 10	19.0	8.0	18.7	7.60	0.718	5.46	Surging badly, falling
Jul 25	13.0	9.0	27.6	8.61	0.775	6.67	

STATION NAME: BURNT TIMBER CREEK AT FORESTRY TRUNK ROAD NUMBER: 05CA906

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 14	17.0	12.0	23.8	5.56	0.662	3.46	
Sep 13	8.0	5.0	16.3	4.22	0.483	2.04	
Oct 02	6.0	5.0	11.8	3.38	0.320	1.08	
Oct 30	6.0	1.0	13.9	4.02	0.296	1.19	B, some ice

B - Ice Conditions

STATION NAME: CALLING RIVER NEAR THE MOUTH **NUMBER:** 07CB904

LOCATION: Approximately 300 m upstream of confluence with Athabasca River.

LATITUDE: 55° 05' 29" **LONGITUDE:** 112° 53' 13"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 07	9.0	0.0	9.0	2.29	0.057	0.130	B

B - Ice Conditons

STATION NAME: CAMROSE CREEK NEAR CAMROSE **NUMBER:** 05FA921

LOCATION: 6.0 km South and 3.7 km West of Camrose.

LATITUDE: 52° 56' 55" **LONGITUDE:** 112° 52' 23"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1984, 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Re-activated for request by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	2.0	3.0	6.5	3.30	0.348	1.15	
May 22	20.0	17.0	4.1	1.18	0.902	1.06	Sewage release during measurement
Aug 27	19.0	17.0	2.8	0.28	0.568	0.159	
Oct 09	14.0	7.0	3.3	0.42	0.569	0.239	

STATION NAME: CANAL OFF PEKISKO CREEK AT E-P RANCH NUMBER: 05BL918

LOCATION: 5 km West of Highway #22 Junction. 14 km South of Longview and 200 m downstream of E-P Ranch bridge. (NW 1-17-3-W5)

LATITUDE: 50° 24' 30" LONGITUDE: 114° 17' 00"

STATION CATEGORY: Recording - H-Flume DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1984 - 1989 (Non Recording); 1990 (Recording)

STAGE DISCHARGE CURVE: Yes, Using H-Flume

REMARKS: Installed H-Flume complete with recorder in April 1990. Data not published by W.S.C. until 1991.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 01	6.0	8.0	0.9	0.08	0.231	0.018	
May 15	7.0	5.0	1.1	0.16	0.306	0.049	
May 23	11.0	4.0	1.1	0.16	0.344	0.055	
Jul 12	28.0	24.0	1.6	0.51	0.416	0.212	
Jul 17			2.3	0.70	0.26	0.186	
Jul 25			1.1	0.14	0.193	0.027	
Aug 07			0.8	0.05	0.160	0.008	
Aug 21	19.0	17.0	0.5	0.02	0.070	0.001	
Sep 05	15.0	12.0	0.5	0.02	0.031	0.0005	
Sep 27	5.0	8.5	1.0	0.09	0.256	0.023	
Oct 10	0.5	3.0	1.2	0.24	0.352	0.085	
Oct 18	2.0	1.0	1.3	0.21	0.290	0.061	
Oct 30	7.0	4.0	1.3	0.20	0.270	0.054	

STATION NAME: CASTOR CREEK NEAR CASTOR NUMBER: 05FC902

LOCATION: 2 km Southeast of Castor. (23-37-14-W4)

LATITUDE: 52° 11' 57" LONGITUDE: 111° 53' 57"

STATION CATEGORY: Non recording DRAINAGE AREA: 99.5 km^2

PERIOD OF RECORD: 1962 - 1990

STAGE DISCHARGE CURVE: Poor - subject to beaver activity

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 06	2.0	1.0	2.9	1.45	0.587	0.851	
Apr 11	1.0	3.0	1.9	0.46	0.731	0.336	
Apr 17	17.0	6.0	1.7	0.31	0.398	0.124	
Apr 25	11.0	9.0				0.003	E
May 28	23.0	18.0				0.001	E
Jul 19	14.0	17.0	2.2	0.49	0.239	0.116	Weeds
Aug 28	25.0					0.000	
Oct 10	6.0	6.0				0.000	

E - Estimate

STATION NAME: CASTOR CREEK NEAR THE MOUTH NUMBER: 05FC909

LOCATION: From Coronation, 13.6 km West on Highway #12, and 23.0 km North. (NE 3-39-12-W4)

LATITUDE: 52° 19' 36" LONGITUDE: 111° 38' 18"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 06	4.0[E]	2.0[E]	6.0	2.11	0.905	1.91	
May 28	24.0	18.0	0.7	0.04	0.128	0.005	

STATION NAME: CHAIN LAKES North DAM OUTFLOW NUMBER: 05BL923

LOCATION: 8 km North of Chain Lakes Provincial Park on Highway #22.

(Sec 28-15-02-W5)

LATITUDE: 50° 17' 23" LONGITUDE: 114° 13' 36"

STATION CATEGORY: Non-Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1977 - 1990 (As required)

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Development and Operations Division as required.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 05			1.2	2.50	0.026	0.066	
Jul 24			1.7	0.43	0.228	0.098	
Jul 25			1.9	0.63	0.196	0.118	

STATION NAME: CHAIN LAKES SOUTH DAM RIPARIAN FLOW NUMBER: 05AB909

LOCATION: Sec. 27-14-2-5 at Provincial Park.

LATITUDE: 50° 11' 45" LONGITUDE: 114° 11' 08"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1977-1990

STAGE DISCHARGE CURVE: Good

REMARKS: Requested by Development and Operations. Measurements made when requested.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Nov 01			3.2	0.57	0.561	0.320	
Nov 20			3.2	0.67	0.640	0.429	

STATION NAME: CHENAL DES QUATRE FOURCHES BELOW FOUR FORKS NUMBER: 07KP006

LOCATION: 11.3 km Southwest of Fort Chipewyan.

LATITUDE: 58° 39' 05" LONGITUDE: 111° 17' 50"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km²

PERIOD OF RECORD: 1970 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station

Subject to reverse flow

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m²	m/s	m³/s	
Jan 17	-20.0	0.0	90	488	0.240	117	@ winter road crossing; Flows towards Peace River
Feb 20	-15.0	0.0	84	449	0.236	106	@ winter road crossing; Flows towards Peace River
Mar 27	1.0	0.0	80	399	0.313	125	@ winter road crossing; Flows towards Peace River
May 31	12.0	15.0	153	517	0.306	158	Flows towards Peace River
Jun 14	17.0	15.0	153	568	0.315	179	Flows towards Four Forks
Jun 21	22.0	16.0	156	627	0.667	418	Flows towards Four Forks
Jul 06	23.0	18.0	156	604	0.479	289	Flows towards Peace River
Jul 19	22.0	15.0	157	594	0.567	337	Flows towards Peace River

STATION NAME: CHENAL DES QUATRE FOURCHES BELOW FOUR FORKS

NUMBER: 07KF006

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 02	20.0	16.0	150	520	0.615	320	Flows towards Peace River
Aug 16	21.0	17.0	153	546	0.694	379	Flows towards Peace River
Aug 30	20.0	16.0	152	537	0.715	384	Flows towards Peace River
Sep 13	13.0	10.0	151	494	0.652	322	Flows towards Peace River
Sep 26	10.0	9.0	150	483	0.644	311	Flows towards Peace River
Dec 02	-30.0	0.0	85.0	461	0.230	106	Flows towards Peace River, @ winter road crossing

STATION NAME: CONNOR CREEK NEAR SANGUDO NUMBER: 07EB009

LOCATION: From Highway #43 crossing with Pembina River 12.2 km North, 3.2 km West and 1.9 km North. (SE 22-58-07-W5)

LATITUDE: 54° 01' 23" LONGITUDE: 114° 56' 39"

STATION CATEGORY: Hydrometric Recording DRAINAGE AREA: 165 km^2

PERIOD OF RECORD: 1987, 1989 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Environment Canada, Water Resources Branch formerly operated this station from 1980 - 1986.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 08	0.0	0.0	20.0	7.89	0.082	0.646	B
Mar 16	1.0[B]	0.5[B]	3.6	0.69	0.452	0.315	B
Mar 28						0.150	B, E
Apr 03			3.5	0.67	0.744	0.498	B
Apr 18	12.0[B]	4.0[B]				0.150	E
May 30	18.0	18.0				0.150	E
Jul 19	17.0	19.0				0.000	
Jul 31	28.0	21.0				0.000	
Aug 09	23.0	21.0				0.000	
Aug 31	15.0	17.0				0.000	
Oct 26	4.0	2.0				0.000	B

E - Estimate
B - Ice Conditions

STATION NAME: DEADFISH CANAL BELOW JANET RESERVOIR **NUMBER:** 05CH919

LOCATION: Approximately 0.3 km below Janet Reservoir outlet. (15-24-14-W4)

LATITUDE: 51° 02' 22" **LONGITUDE:** 111° 53' 06"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 16	23.0	21.0	5.8	2.29	0.344	0.787	Weeds

STATION NAME: DEADFISH PIPELINE OUTFALL BELOW DEADFISH PUMPHOUSE NUMBER: 05CH920

LOCATION: Approximately 100 m below pipeline outfall. (20-24-14-W4)

LATITUDE: 51° 03' 27" LONGITUDE: 111° 55' 12"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 16	20.0	21.0	5.4	2.31	0.374	0.864	Measurement 100 m below outfall

STATION NAME: DOGPOUND CREEK NEAR DIDSBURY NUMBER: 05CB904

LOCATION: 12.8 km West and 1.6 km North of Didsbury. (SE 26-31-3-W5)

LATITUDE: 51° 40' 49" LONGITUDE: 114° 20' 03"

STATION CATEGORY: Non recording DRAINAGE AREA: 876 km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	10.0	2.0	8.6	5.21	0.415	2.16	
Apr 05	7.0	4.0	8.5	3.46	0.288	0.997	
Apr 11	-5.0	1.0	8.5	3.21	0.283	0.907	
Apr 18	6.0	7.0	8.4	2.58	0.267	0.688	
May 09	8.0	11.0	8.5	2.06	0.386	0.724	
May 28	12.0	10.0	10.8	8.17	0.428	3.50	
Jun 02	7.0	10.0	12.6	13.3	0.594	7.90	WL rising
Jun 06	5.5	5.0	9.0	8.30	0.524	4.35	
Jun 13	8.0	5.0	9.5	7.34	0.457	3.33	
Jun 18	15.0	19.0	8.6	4.59	0.355	1.63	
Jul 11	19.0	12.0	8.3	3.26	0.310	1.01	
Aug 15	14.0	19.0	8.4	1.44	0.231	0.332	
Sep 13	17.0	15.0	7.9	1.87	0.212	0.396	
Oct 01	11.0	9.0	6.1	2.48	0.118	0.293	
Oct 30	4.0	1.0	8.5	1.43	0.234	0.334	

STATION NAME: DRIFTPILE RIVER AT DRIFTPILE **NUMBER:** 07EH003

LOCATION: From High Prairie, 47.5 km East on Highway #2. (NE 20-73-12-W5)

LATITUDE: 55° 20' 34" **LONGITUDE:** 115° 47' 57"

STATION CATEGORY: Non Recording **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Operated by WSC from 1965 - 86.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 15	20.0	19.0	8.8	1.12	0.248	0.278	

STATION NAME: ELLS RIVER NEAR THE MOUTH NUMBER: 07DA017

LOCATION: 11 km Northwest of Fort McKay, 3 km upstream from confluence of Joslyn Creek.

LATITUDE: 57° 16' 04" LONGITUDE: 111° 42' 51"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 14	10.0	0.0	13.5	4.85	0.377	1.83	

STATION NAME: EMBARRAS RIVER BELOW DIVERGENCE NUMBER: 07DD003

LOCATION: 40.5 km southwest of Fort Chipewyan.

LATITUDE: 58° 25' 20" LONGITUDE: 111° 33' 05"

STATION CATEGORY: Miscellaneous/Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1971 - 1986/1987 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Peace Athabasca Delta Station

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 02	7.0	0.0	116	323	0.910	294	
May 23	20.0	12.0	115	244	0.762	186	
Jun 07	12.0	14.0	117	382	0.976	373	
Jun 20	19.0	16.0	120	526	1.11	582	
Jun 27	21.0	18.0	116	331	0.939	311	
Jul 11	25.0	19.0	117	410	0.973	399	
Jul 25	24.0	19.0	114	230	0.704	162	
Aug 08	20.0	18.0	113	169	0.586	99.1	
Aug 21	-	16.0	112	139	0.477	66.3	
Sep 05	10.0	15.0	110	134	0.439	58.8	
Sep 20	11.0	12.0	110	83.7	0.373	31.2	

STATION NAME: EMBARRAS RIVER BREAKTHROUGH TO MAMAWI LAKE NUMBER: 07KF015

LOCATION: Approximately 34 km South of Fort Chipewyan located on the West bank of Embarras River.

LATITUDE: 58° 28' LONGITUDE: 111° 29'

STATION CATEGORY: Miscellaneous/Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1982 - 1986/1987 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Peace - Athabasca Delta Station

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 03	10.0	0.0	39.0	167	0.916	153	
May 23	14.0	12.0	38.5	137	0.759	104	
Jun 07	11.0	14.0	39.0	173	1.093	189	
Jun 20	20.0	16.0	43.0	204	1.410	288	
Jun 27	20.0	17.0	40.0	171	0.953	163	
Jul 11	23.0	19.0	43.0	195	1.180	231	
Jul 25	23.0	19.0	39.0	145	0.738	107	
Aug 08	20.0	18.0	38.5	118	0.537	63.4	
Aug 22	18.0	16.0	37.5	113	0.466	52.7	
Sep 04	16.0	15.0	37.0	105	0.432	45.4	
Sep 20	11.0	12.0	36.5	93.1	0.302	28.1	
Dec 06	-10.0	0.0					

STATION NAME: ETHEL LAKE OUTFLOW AT CONTROL WEIR NUMBER: 06AC008

LOCATION: Approx. 8.1 km West and 7.2 km North of Town of Cold Lake.
(12-64-03-W4)

LATITUDE: 54° 32' 00" LONGITUDE: 110° 19' 00"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 17	17.0	20.0	39.4	16.1	0.049	0.790	Weeds

STATION NAME: FALLENTIMBER CREEK AT FORESTRY TRUNK ROAD NUMBER: 05CA908

LOCATION: On the Forestry Trunk Road, 28 km Southeast of Mountain Aire Lodge. (16-29-08-W5)

LATITUDE: 51° 29' 18" LONGITUDE: 115° 04' 37"

STATION CATEGORY: Non recording DRAINAGE AREA: 83 km^2

PERIOD OF RECORD: 1964 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	6.0	0.0				0.125	B, E
Apr 18	13.0	0.0				0.170	B, E
May 09	4.0	2.0	9.7	2.10	0.359	0.753	
May 28	10.0	5.0	12.9	6.75	0.815	5.50	
May 31	12.0	3.0	13.7	6.88	0.837	5.76	
Jun 01	6.0	4.0	14.5	11.5	1.426	16.4	small debris
Jun 02			14.0	13.6	1.728	23.5	possible degradation
Jun 03	9.0	4.0	12.8	10.2	1.255	12.8	
Jun 05	9.0	5.0	12.0	6.67	0.840	5.60	
Jun 12	7.0	5.0	8.8	3.32	0.569	1.89	channel altered by high water
Jul 10	16.0	9.0	6.2	2.16	0.390	0.842	
Jul 25	13.0	10.0	9.5	3.12	0.593	1.85	

STATION NAME: FALLENTIMBER CREEK AT FORESTRY TRUNK ROAD NUMBER: 05CA908

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 14	14.0	12.0	8.5	2.23	0.356	0.793	
Sep 13	1.0	6.0	8.1	1.81	0.267	0.483	
Oct 02	7.0	7.0	7.6	1.33	0.158	0.210	
Oct 30	3.0	0.0	7.7	1.39	0.204	0.284	B

B - Ice Conditions

E - Estimate

STATION NAME: FALUN CREEK SITE NEAR PIPESTONE **NUMBER:** 05FA927

LOCATION: 4.8 km South, 2.4 km East of Pipestone store. (SE 31-46-26-W4)

LATITUDE: 53° 00' 11" **LONGITUDE:** 113° 45' 43"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 29	10.0	1.0	8.6	4.14	0.623	2.58	B @ 16:15; over ice - snow in bush
Mar 30	5.0	0.0	8.6	3.34	0.566	1.89	B @ 10:45
Mar 31	7.0	0.0	8.6	11.2	0.211	2.36	B @ 12:00; ice out; B.W.

B - Ice Conditons

STATION NAME: FLETCHER CHANNEL BELOW DIVERGENCE NUMBER: 07DD004

LOCATION: Approximately 28.8 km South of Fort Chipewyan.

LATITUDE: 58° 27' 55" LONGITUDE: 111° 04' 30"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1971 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace - Athabasca Delta Station

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 06	10.0	14.0	107	348	0.842	293	
Jun 28	22.0	18.0	109	331	0.943	312	
Jun 29	22.0	17.0					
Jul 12	25.0	19.0	109	411	0.959	394	
Jul 26	25.0	19.0	99.0	309	0.667	206	
Aug 09	18.0	18.0	94.0	257	0.502	129	
Aug 20	-	18.0	88.0	232	0.431	99.9	
Sep 18	10.0	14.0	82.5	199	0.333	66.2	

STATION NAME: FOOTHILLS CREEK NEAR PINCHER CREEK NUMBER: 05AD901

LOCATION: On bridge pier on left bank of creek, 16 km South and 5 km East of Brocket. (SE 27-5-28-W4)

LATITUDE: 49° 24' 25" LONGITUDE: 113° 40' 50"

STATION CATEGORY: Recording DRAINAGE AREA: 134 km^2

PERIOD OF RECORD: 1982 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: 1990 data not computable - 1991 data to be published by W.S.C.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 02			5.0	0.77	0.859	0.665	
May 02			5.8	1.64	1.323	2.17	
May 04			6.0	1.76	1.335	2.35	
May 22			5.0	0.74	0.636	0.471	
Jun 19			3.8	0.63	0.485	0.306	
Jul 24						0.000	
Sep 26						0.000	
Nov 05						0.000	

STATION NAME: GALWEY BROOK NEAR WATERTON PARK **NUMBER:** 05AD904

LOCATION: North of Waterton Park boundary on Highway #6, approximately 8.8 km from Waterton Park gate. (SE 19-2-29-W4)

LATITUDE: 49° 08' 25" **LONGITUDE:** 113° 51' 00"

STATION CATEGORY: Recording **DRAINAGE AREA:** 20.5 km^2

PERIOD OF RECORD: 1982 - 1989 Recording, 1990 Non-Recording

STAGE DISCHARGE CURVE: Yes

REMARKS: 1990 recording data not publishable - silt in well.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05			2.6	0.23	0.409	0.094	
May 07			6.0	1.93	0.974	1.88	
Jun 30			4.6	1.19	0.573	0.682	
Jul 27			3.8	0.68	0.300	0.204	
Aug 23			4.0	0.49	0.204	0.100	
Oct 18			3.0	0.35	0.089	0.031	

STATION NAME: GLEN LATERAL AT COCHRANE LAKE OUTFLOW **NUMBER:** 05AD925

LOCATION: 2.4 km North of Hillspring to Highway #505, 0.8 km East and 1.6 km North. (NW 29-4-27-4)

LATITUDE: 49° 19' 55" **LONGITUDE:** 113° 36' 20"

STATION CATEGORY: Non recording **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1986 - 1988; 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements except for 1988 and 1990.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 20			8.0	4.08	0.293	1.20	
Sep 26			6.4	2.20	0.324	0.712	

STATION NAME: GOOSE ISLAND CHANNEL BELOW DIVERGENCE **NUMBER:** 07DD005

LOCATION: 27.5 km Southeast of Fort Chipewyan.

LATITUDE: 58° 28' 15" **LONGITUDE:** 110° 51' 20"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1971 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 06	10.0	14.0	101	616	0.851	524	
Jun 28	24.0	18.0	103	634	0.894	567	
Jun 29	22.0	17.0					
Jul 12	26.0	19.0	103	671	0.899	603	
Jul 26	25.0	19.0	101	614	0.668	410	
Aug 09	18.0	18.0	103	603	0.468	282	
Aug 20	24.0	18.0	99.0	541	0.418	226	
Sep 18	12.0	14.0	99.5	516	0.331	171	

STATION NAME: GRATTON CREEK NEAR IRMA **NUMBER:** 05FB904

LOCATION: 6.0 km East and 2.5 km South of Irma. (NW 18-45-8-W4)

LATITUDE: 52° 52' 46" **LONGITUDE:** 111° 09' 23"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 29	24.0					0.000	Ponded at site, channel dry downstream

STATION NAME: GRIZZLY BEAR CREEK NEAR THE MOUTH NUMBER: 05FE907

LOCATION: From junction of Highway #14 and #41 near Wainwright, 31.0 km North and 16.8 km East. (SE 3-48-5-W4)

LATITUDE: 53° 06' 31" LONGITUDE: 110o 38' 30"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 29	24.0	19.0				0.003	E, beaver activity

E - Estimate

STATION NAME: HOUSE RIVER NEAR THE MOUTH NUMBER: 07CB906

LOCATION: 200 m upstream of confluence with Athabasca River.

LATITUDE: 56° 12' 03" LONGITUDE: 112° 30' 14"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 08	2.0	0.0	15.5	11.6	0.140	1.62	B @ 13:18

B - Ice Conditions

STATION NAME: ISLE LAKE OUTFLOW NEAR DARWELL NUMBER: 05EA920

LOCATION: On bridge approx. 1.6 km West of Darwell on Highway #634.

LATITUDE: 53° 40' 12" LONGITUDE: 113° 36' 43"

STATION CATEGORY: Non recording DRAINAGE AREA: 322 km^2

PERIOD OF RECORD: 1975 - 1990

STAGE DISCHARGE CURVE: Poor - Weed Growth

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	10.0	1.0	11.1	5.68	0.353	2.0	No ice
Apr 10	12.0	1.0	10.8	4.62	0.335	1.55	Lake Elev = 729.74 m
Apr 17	18.0	8.0	9.80	4.65	0.347	1.62	Ice on lake, Lake Elev = 729.70 m
Apr 25	13.0	10.0	9.80	5.02	0.371	1.86	
May 04	7.0	10.0	9.70	4.70	0.345	1.62	Lake Elev = 729.73 m Lake ice free
May 10	6.0	10.0	9.80	4.62	0.349	1.61	
May 16	10.0	12.0	9.70	4.38	0.304	1.33	Lake Elev = 729.61 m
May 30	18.0	18.0	9.80	5.00	0.316	1.39	Weeds starting
Jun 15	23.0	21.0	9.30	4.81	0.270	1.30	Measurement at surface
Jul 05			11.8	9.02	0.409	3.69	Lake Elev = 730.03 m Heavy rainfall

STATION NAME: ISLE LAKE OUTFLOW NEAR DARWELL NUMBER: 05EA920

Date	Temp ^{0}C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 17	23.0	13.0	10.4	6.91	0.195	1.35	Heavy weeds
Aug 01	25.0	20.0	11.5	8.26	0.061	0.501	Lake Elev = 729.98 m Weeds, mmt at 0.6
Aug 21	28.0	22.0	11.1	8.02	0.072	0.580	Lake Elev = 729.90 m Weeds, mmt at 0.6
Aug 21	28.0	22.0	11.1	7.94	0.107	0.852	Lake Elev = 729.90 m Weeds, surface mmt
Sep 05	22.0	11.0	11.0	7.85	0.078	0.614	Lake Elev = 729.88 m Weeds, mmt at 0.6
Sep 05	22.0	11.0	11.0	7.96	0.091	0.725	Lake Elev = 729.88 m Weeds, surface mmt
Nov 02	3.0	3.0	9.60	4.05	0.141	0.571	No ice, weeds

STATION NAME: JAMES RIVER NEAR JAMES RIVER RANGER STATION NUMBER: 05CA910

LOCATION: 10 km Northwest of Bearberry. (1-34-8-W5)

LATITUDE: 51° 53' 29" LONGITUDE: 115° 00' 05"

STATION CATEGORY: Non recording DRAINAGE AREA: 565 km^2

PERIOD OF RECORD: 1963 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	8.0	0.0	7.1	3.14	0.615	1.93	B
Apr 11	-1.0	0.0	9.4	3.44	0.488	1.68	B
Apr 18	11.0	3.0	15.3	5.65	0.655	3.70	
May 09	4.0	3.0	30.1	9.00	0.717	6.45	
May 28	11.0	5.0	28.0	19.8	1.672	33.1	
May 31	14.0	7.0	27.8	19.2	1.662	31.9	Turbid
Jun 01	9.0	6.0	28.8	28.0	2.014	56.4	Debris - trees, surging; rising stage
Jun 02	10.0	8.0	31.5	72.8	3.008	219	Heavy debris, falling stage.
Jun 03	17.0	8.0	28.3	39.9	2.238	89.2	Falling
Jun 12	12.0	7.0	23.0	20.1	1.490	29.9	
Jun 19	15.0	8.0	21.5	14.1	1.071	15.1	
Jul 10	23.0	15.0	25.6	10.3	0.719	7.41	

STATION NAME: JAMES RIVER NEAR JAMES RIVER RANGER STATION

NUMBER: 05CA910

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 25	14.0	12.0	26.5	10.3	0.622	6.41	
Aug 14	22.0	16.0	18.2	6.23	0.350	2.18	
Sep 16	16.0	10.0	11.7	4.34	0.343	1.49	
Oct 02	8.0	6.0	10.3	3.55	0.263	0.933	
Oct 30	8.0	1.0	11.6	3.93	0.121	0.474	B

B - Ice Conditions

STATION NAME: KNEEHILLS CREEK AT SUNNYSLOPE NUMBER: 05CE904

LOCATION: At Sunnyslope (12-31-26-W4)

LATITUDE: 51° 38' 49" LONGITUDE: 113° 33' 19"

STATION CATEGORY: Non recording DRAINAGE AREA: 551 km^2

PERIOD OF RECORD: 1964 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS: Heavy weed growth and beaver activity.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 02	17.0	3.0	16.0	12.9	0.337	4.33	HWM = 0.280 m above WL
Apr 04	6.0	5.0	14.0	11.3	0.196	2.21	
Apr 06	4.0	5.0	15.1	9.54	0.136	1.29	
Apr 10	-10.0	1.0	4.7	2.21	0.398	0.879	
Apr 17	15.0	9.0	4.0	1.67	0.251	0.419	
May 29	18.0	16.0	4.8	1.82	0.230	0.419	
Jun 11	10.0	16.0	4.8	3.22	0.436	1.49	HWM = 0.710 m above WL
Jun 19	25.0	21.0	13.8	9.20	0.262	2.41	
Jul 09	28.0	24.0	3.5	1.57	0.536	0.842	
Jul 24	22.0	18.0	2.0	0.19	0.344	0.066	
Aug 15	18.0	19.0				0.015	E
Sep 12	16.0	15.0	1.4	0.07	0.171	0.012	
Oct 01	11.0	6.0	1.5	0.06	0.138	0.008	
Oct 31	5.0	3.0				0.003	E

E - Estimate

STATION NAME: L.N.I.D. MONARCH BRANCH CANAL NUMBER: 05AC028

BELOW MONARCH HEADGATES

LOCATION: 3.2 km North of Nobleford, 7.2 km West of Highway #23 and 0.8 km North. (SW 14-11-24-W4)

LATITUDE: 49° 54' 27" LONGITUDE: 13° 10' 49"

STATION CATEGORY: Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1977 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Data not computed for 1990 - Too few measurements.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 24						0.000	
Apr 26						0.000	
May 09			9.0	3.92	0.263	1.03	
May 23			11.0	8.52	0.572	4.88	
Jun 22			12.0	11.8	0.668	7.88	
Jul 10			14.0	17.4	0.763	13.2	
Oct 23						0.000	

STATION NAME: LA BICHE RIVER NEAR PLAMONDON NUMBER: 07AC007

LOCATION: Approximately 11 km North of Plamondon.

LATITUDE: 54° 57' 00" LONGITUDE: 112° 22' 30"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: 4,790 km^2

PERIOD OF RECORD: 1971; 1983 - 1984; 1989 - 1990

STAGE DISCHARGE CURVE: Various - weed effect curves

REMARKS: Unpublished data for 1971 from Environment Canada, Water Resources Branch. Later data for Hydrology Branch.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 14	15.0	11.0	49.0	29.6	0.385	11.4	
Jun 20	22.0	20.0	43.3	22.3	0.111	2.48	Weeds
Jul 18	13.0	18.0	34.0	20.7	0.092	1.90	Weeds
Aug 09	27.5	22.0	45.0	21.6	0.106	2.29	Weeds
Sep 05	18.0	16.0	45.0	21.7	0.098	2.12	Weeds
Sep 25	20.0	13.5	46.0	22.4	0.120	2.69	Weeds
Oct 22	6.0	1.5	47.0	22.0	0.111	2.45	Weeds

STATION NAME: LA BICHE RIVER NEAR THE MOUTH NUMBER: 07CB905

LOCATION: Approximately 1.6 km upstream of confluence with Athabasca River

LATITUDE: 55° 00' 53" LONGITUDE: 112° 42' 32"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 07	6.0	0.0	13.0	6.41	0.365	2.34	B

STATION NAME: LAC STE. ANNE OUTFLOW NEAR ALBERTA BEACH NUMBER: 05EA919

LOCATION: At South bridge on Highway #43 approx. 4.5 km East of Gunn Turnoff. (SW 6-55-2-W4)

LATITUDE: 53° 43' 00" LONGITUDE: 110° 17' 33"

STATION CATEGORY: Non recording DRAINAGE AREA: 396 km^2

PERIOD OF RECORD: 1975 - 1990

STAGE DISCHARGE CURVE: Poor - Weed Growth

REMARKS: Requested by Hydrology Branch to establish a Lake Level vs. Discharge relationship. New location site established.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jan 26	-15.0	0.0	8.8	2.43	0.848	2.06	B, Slush Ice, Lake Elev = 723.00 m
Feb 22	10.0	0.5	21.0	8.76	0.229	2.01	B, Lake Elev = 722.95 m
Mar 19	10.0	1.0	10.6	2.68	0.709	1.90	B, Lake Elev = 722.92 m
Apr 03	9.0	1.0	13.0	5.43	0.528	2.67	B, Solid ice on lake, Lake Elev = 722.96 m
Apr 12	3.0	1.0	8.8	2.24	1.170	2.62	B, Lake ice covered, Lake Elev = 722.98 m
Apr 17	18.0	8.0	8.8	2.41	1.227	2.96	B, River open, Lake Elev = 722.99 m

STATION NAME: LAC STE. ANNE OUTFLOW NEAR ALBERTA BEACH

NUMBER: 05EA919

Date 1990	Temp °C Air	Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
Apr 25	15.0	10.0	8.8	2.81	1.232	3.46	B, Lake ice 1/2 gone, Lake Elev = 723.01 m
May 04	12.0	10.0	8.7	2.58	1.210	3.12	Lake Elev = 723.01 m
May 10	10.0	12.0	8.8	2.79	1.293	3.61	Lake Elev = 723.02 m
May 16	10.0	12.0	8.6	2.59	1.163	3.02	Lake Elev = 723.00 m
May 30	18.0	18.0	8.7	2.65	1.143	3.03	Lake Elev = 723.01 m
Jun 15	23.0	21.0	8.8	2.28	0.978	2.23	Lake Elev = 722.98 m
Jun 20	23.0	21.0	8.9	2.27	0.938	2.13	Lake Elev = 722.98 m
Jul 05	23.0	17.0	9.0	3.00	1.290	3.87	Lake Elev = 723.03 m
Jul 17	22.0	13.0	8.6	2.36	0.949	2.24	Lake Elev = 723.04 m
Aug 01	27.0	23.0	9.0	2.42	0.876	2.12	Lake Elev = 722.99 m
Aug 21	26.0	23.0	8.7	2.15	0.758	1.63	Lake Elev = 722.90 m
Sep 05	22.0	11.0	8.6	2.13	0.671	1.43	Lake Elev = 722.90 m
Oct 26	7.0	6.0	3.6	0.790	0.424	0.335	Lake Elev = 722.81 m

STATION NAME: LEAVITT-AETNA MAIN CANAL AT BEAZER ROAD NUMBER: 05AD915

LOCATION: 30 m downstream of structure on Canal just off Highway #5 on Beazer Road, 4.5 km East of Mountain View. (NW 22-02-27-W4)

LATITUDE: 49° 08' 10" LONGITUDE: 113° 32' 50"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch, except 1990.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			5.6	2.35	0.677	1.59	
Sep 25			5.6	2.39	0.665	1.59	

STATION NAME: LEAVITT-AETNA MAIN CANAL BELOW M.V.I.D. TURNOUT NUMBER: 05AD914

LOCATION: 300 m downstream of diversion structure on Main Canal (East) below Paine Lake 2.4 km West and 3.2 km South of Mountainview. (SW 12-2-28-W4)

LATITUDE: 49° 06' 20" LONGITUDE: 113° 38' 00"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch, except 1990.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			8.5	2.81	0.620	1.74	
Sep 25			8.5	2.38	0.672	1.60	

STATION NAME: LEAVITT-AETNA MAIN CANAL NEAR LEAVITT NUMBER: 05AD916

LOCATION: 20 m above drop structure on Canal on East side of Gravel Road 1.0 km South of Leavitt. (SW 32-02-26-W4)

LATITUDE: 49° 09' 55" LONGITUDE: 113° 27' 20"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch, except 1990.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			3.9	1.93	0.739	1.43	
Sep 26			4.4	1.25	0.872	1.09	

STATION NAME: LEAVITT IRRIGATION DISTRICT NUMBER: 05AE913

LATERAL "K"

LOCATION: 1.6 km East of Leavitt, 1.6 km South, then 1.6 km East and follow Canal Bank for 2.0 km to Station. (NW 27-2-26-W4)

LATITUDE: 49° 09' 10" LONGITUDE: 113° 23' 00"

STATION CATEGORY: Non Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Monthly measurements for Headworks Branch, except 1990.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			2.4	0.53	0.332	0.177	
Sep 26			2.4	0.87	0.387	0.337	

STATION NAME: LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT HEADGATES NUMBER: 05AB032

LOCATION: 300 m downstream of headgates on Peigan Indian Reserve. (Sec 21-8-27-W4)

LATITUDE: 49° 40' 00" LONGITUDE: 113° 36' 00"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1976 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Was a recording station until 1980. Metered on request only for Headworks Branch.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 27			26.0	48.3	0.903	43.6	

STATION NAME: LITTLE BOW RIVER BELOW VULCAN WATER SUPPLY NUMBER: 05AC912

LOCATION: 16 km West of Kirkaldy, 2.4 km South then 1.6 km on road through field. (NW 35-15-26-W4)

LATITUDE: 50^0 18' 00" LONGITUDE: 113^0 29' 00"

STATION CATEGORY: Non Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1980 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Metered on request for W.R.A.

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 18	14.0	9.0	8.0	1.83	0.398	0.728	

STATION NAME: LITTLE BOW RIVER UPSTREAM OF TRAVERS RESERVOIR INLET NUMBER: 05AC916

LOCATION: 12.6 km East of Highway #23 on Gravel Road, 3 km North of Stavely Road.

LATITUDE: 50^0 12' 20" LONGITUDE: 112^0 58' 45"

STATION CATEGORY: Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1980 -1981 (Non Recording), 1989 - 1990 (Recording)

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Water Resources Administration Division. Discharge data not computed for 1989-90. Recorder used for visual water level check only.

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 15			10.5	2.53	0.451	1.14	

STATION NAME: LITTLE SMOKY RIVER AT SECONDARY #744 NUMBER: 07GH910

LOCATION: From Highway #49, 16.0 km South on Secondary #744 to bridge. (NW 20-76-22-W5)

LATITUDE: 55° 36' LONGITUDE: 117° 23'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 15	-26.0	0.0	50.5	36.4	0.175	6.36	B
Mar 06	3.0	0.0	47.7	41.8	0.352	14.7	B

B = ice conditions

STATION NAME: LOBSTICK RIVER NEAR NITON NUMBER: 07BB911

LOCATION: 1 km East of Ninton Junction on Highway #16. (29-53-13-W5)

LATITUDE: 53° 39' 07" LONGITUDE: 115° 45' 02"

STATION CATEGORY: Non recording DRAINAGE AREA: 163 km^2

PERIOD OF RECORD: 1960 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS: Beaver activity evident.

Date	Temp °C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	4.0	0.5	7.70	6.34	0.470	2.98	B
Apr 10	0.0	0.5	7.60	4.09	0.281	1.15	B
Apr 17	12.0	2.5	7.40	4.43	3.38	1.50	
Apr 20	14.0	9.0	7.20	4.87	0.498	2.42	
Apr 24	8.0	7.0	7.60	5.35	0.547	2.93	
May 15	10.0	10.0	7.80	4.08	0.283	1.15	
May 28	19.0	12.0	7.50	6.76	0.508	3.43	
Jun 04	12.0	14.0	7.90	6.27	0.547	3.43	
Jun 05	17.0	12.0	21.0	34.4	0.583	20.0	Heavy rainfall
Jun 12	14.0	12.0	19.5	38.8	0.844	32.4	
Jun 14	29.0	15.0	13.5	21.2	0.727	15.4	
Jun 18	21.0	18.0	7.50	4.95	0.507	2.51	Low water
Jul 03	9.0	8.0	21.0	34.7	0.620	21.5	Water level rising, Heavy rainfall

STATION NAME: LOBSTICK RIVER NEAR NITON NUMBER: 07BB911

Date	Temp ^{0}C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 25	27.0	23.0	4.0	0.52	0.605	0.316	Very low water
Aug 21	17.0	18.0	1.90	0.19	0.358	0.068	
Sep 11	10.0	12.0	1.90	0.14	0.268	0.038	Low water
Sep 26	6.0	9.0	2.0	0.16	0.260	0.042	
Oct 15	4.5	6.0	2.0	0.25	0.413	0.105	
Nov 02	-3.0	0.5	2.0	0.23	0.342	0.079	B

B - Ice Conditions

STATION NAME: MAMAWI LAKE CHANNEL AT DOG CAMP NUMBER: 07KP010

LOCATION: Approximately 12.9 km Southwest of Fort Chipewyan

LATITUDE: 58° 38' 00" LONGITUDE: 111° 18' 40"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1970 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 31	16.0	15.0	116	411	0.416	171	
Jun 14	17.0	15.0	122	452	0.602	272	
Jul 06	23.0	18.0	131	449	0.325	146	
Jul 19	23.0	15.0	130	469	0.254	119	
Aug 02	20.0	16.0	117	410	1.09	447	
Aug 15	20.0	17.0	123	449	0.399	179	
Aug 30	20.0	16.0	118	419	0.286	120	
Sep 13	12.0	10.0	115	379	0.623	236	
Sep 26	8.0	9.0	115	390	0.439	171	

STATION NAME: MARSH HEAD CREEK NEAR THE MOUTH NUMBER: 07AE903

LOCATION: 3 - 4 km above confluence with Athabasca River.

LATITUDE: 54° 09' 53" LONGITUDE: 116° 38' 25"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 15	-21.0	0.0	8.0	6.18	0.045	0.279	B

B - Ice Conditions

STATION NAME: MARTEN CREEK AT HIGHWAY 63 NUMBER: 07BG901

LOCATION: At Highway #63 crossing, 37 km North of Slave Lake.

(SE 32-75-6-W5)

LATITUDE: 55^0 32' 21" LONGITUDE: 114^0 53' 24"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp ^0C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 14	23.0	17.0	2.5	0.30	0.285	0.085	

STATION NAME: MEETING CREEK NEAR THE MOUTH NUMBER: 05FC910

LOCATION: 9.8 km East and 3.8 km South of Donalda. (SE 29-41-17-W4)

LATITUDE: 52° 33' 08" LONGITUDE: 112° 24' 43"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 28	23.0	16.0	5.7	0.66	0.052	0.034	
Aug 28	22.0	18.0	0.7	0.02	0.050	0.001	
Oct 10	5.0	4.0				<0.001	E

E - Estimate

STATION NAME: MOUNTAIN VIEW DISTRICT CANAL BELOW PAINE LAKE NUMBER: 05AD913

LOCATION: 100 m downstream of diversion structure below Paine Lake 2.5 km West and 3.2 km South of Mountain View (SW 12-2-28-W4)

LATITUDE: 49^0 06' 20" LONGITUDE: 113^0 38' 00"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS:

Date	Temp^{0}C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 21			3.0	1.11	0.415	0.459	
Sep 25			3.8	1.25	0.306	0.382	

STATION NAME: MUSKEG RIVER NEAR FORT MCKAY NUMBER: 07DA008

LOCATION: 3.5 km Northeast of Fort McKay

LATITUDE: 57° 11' 30" LONGITUDE: 111° 34' 05"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	

STATION NAME: NARROWS CREEK NEAR THE MOUTH NUMBER: 07BG902

LOCATION: Upstream of the North shore of Lesser Slave Lake, 50 km West of Big Point. (SW 15-10-75-W5)

LATITUDE: 55^0 29' 32" LONGITUDE: 115^0 27' 57"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 15						0.000	No flow

STATION NAME: NORTH SASKATCHEWAN RIVER AT DUVERNAY NUMBER: 05ED917

LOCATION: Located at Highway #36, 0.5 km North of the town of Duvernay.
(SW 35-55-12-W4)

LATITUDE: 53° 47' 21" LONGITUDE: 111° 41' 11"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 21	-10.0[E]	0.0[E]	250	366	0.571	209	B
Oct 10	4.0	5.0	229	242	0.483	117	
Oct 18	12.0	6.0	233.5	278	0.550	153	

B - Ice Conditions

STATION NAME: NORTH SASKATCHEWAN RIVER NEAR ELK POINT @ HIGHWAY #41 NUMBER: 05ED916

LOCATION: 4 km South of the town of Elk Point at Highway #41 crossing of the North Saskatchewan. (SW 30-56-6-W4)

LATITUDE: 53° 51' 57" LONGITUDE: 110° 53' 36"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 09	2.0[B]	0.0[B]	201	255	0.569	145	B

B - Ice Conditions

STATION NAME: NORTH SASKATCHEWAN RIVER NEAR MARWAYNE NUMBER: 05EE927

LOCATION: Above Vermilion River confluence, 16.1 km North of Marwayne.
(SW 14-54-3-W4)

LATITUDE: 53° 39' 45" LONGITUDE: 110° 20' 00"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 12	-6.0[B]	0.0	230	414	0.319	132	B @ 13:00, Overflow on ice

B - Ice Conditions

STATION NAME: NORTH SASKATCHEWAN RIVER AT SHANDRO BRIDGE NUMBER: 05EC918

LOCATION: Location at Highway #857 crossing of the North Saskatchewan, 1.2 km West of the town of Wasel. (NW 34-57-15-W4)

LATITUDE: 53° 58' 29" LONGITUDE: 112° 09' 26"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 05	1.0	0.0	237	337	0.359	121	B
Mar 19		0.0	245	368	0.432	159	B @ 11:06
Oct 09	16.0	8.0	225.5	300	0.407	121	

B - Ice Conditions

STATION NAME: NORTH SASKATCHEWAN RIVER BELOW VERMILION RIVER NUMBER: 05KE928

LOCATION: 100 m below Vermilion River confluence, 36.2 km North of Kitscoty. (SE 14-54-3-W4)

LATITUDE: 53° 39' 45" LONGITUDE: 110° 20' 00"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jan 25	-12.0	0.0	207	464	0.287	133[B]	@ 11:30

B - Ice Conditions

STATION NAME: NORTH SASKATCHEWAN RIVER AT WASKATENAU NUMBER: 05BC917

LOCATION: At Secondary #831, 5.3 km South of Sasketnau. (NE 32-58-19-W4)

LATITUDE: 54° 03' 30" LONGITUDE: 112° 47' 22"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Oct 17	8.0	8.0	173	286	0.521	149	

STATION NAME: OLDMAN CREEK NEAR THE MOUTH **NUMBER:** 07AD907

LOCATION: 4 km above confluence with Athabasca River. (SW 16-55-22-W5)

LATITUDE: 53° 45' 00" **LONGITUDE:** 117° 12' 47"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1988 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 16	-24.0	0.0	8.2	2.54	0.441	1.12	B

STATION NAME: OLDMAN RIVER BELOW L.N.I.D. HEADWORKS NUMBER: 05AB918

LOCATION: 13 km West of Junction of Highway #2 and Highway #3 West of Fort Macleod, 5 km North, 1 km West to L.N.I.D. Headworks (21-8-27-W4)

LATITUDE: 49° 40' 00" LONGITUDE: 113° 36' 15"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 20	17.0	13.0	26.0	8.52	0.555	4.73	

STATION NAME: PAINTEARTH CREEK NEAR CASTOR (HWY 861) NUMBER: 05FC908

LOCATION: 18.2 km North of Castor. (NE 22-39-14-W4)

LATITUDE: 52° 22' 26" LONGITUDE: 111° 55' 35"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05	7.0[E]	2.0[E]	9.0	8.97	0.111	0.994	
May 28	21.0	15.0	0.3	0.02	0.116	0.002	
Aug 28	24.0	19.0	0.8	0.02	0.150	0.003	
Oct 10	6.0					<0.001	E

E - Estimate

STATION NAME: PEKISKO CREEK AT E-P RANCH NUMBER: 05BL916

LOCATION: 15.0 km South of Longview and 5.0 km West to E-P Ranch.
(Sec. 1-17-3-W5)

LATITUDE: 50° 24' 30" LONGITUDE: 114° 17' 25"

STATION CATEGORY: Non-Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1984 - 1988; 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Measured bi-weekly for WRM (Calgary) May - Oct.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 01	6.0	8.0	9.5	1.96	0.571	1.12	
May 15	9.0	5.0	11.0	2.57	1.058	2.72	
May 23	13.0	4.0	13.0	3.18	0.887	2.82	
Jun 26	24.0	15.0	7.8	1.93	0.771	1.49	
Jul 12	28.0	24.0	5.9	0.92	0.709	0.652	
Jul 25			5.9	1.74	0.393	0.682	
Aug 07			5.6	1.61	0.426	0.686	
Aug 21	20.0	17.0	4.2	0.68	0.709	0.485	
Sep 05	15.0	12.0	5.0	0.87	0.338	0.292	
Sep 27	7.0	8.5	4.6	0.67	0.212	0.143	
Oct 10	1.0	3.0	5.3	0.96	0.277	0.266	
Oct 18	2.0	1.0	5.0	0.82	0.271	0.222	
Oct 30	9.0	4.0	4.8	0.77	0.235	0.181	

STATION NAME: PEKISKO CREEK AT GALLUP RANCH NUMBER: 05BL920

LOCATION: 4 km South of Longview on Highway #22 and 9 km Southeast of Highway #22 to Gallup Ranch and 0.6 km to ford West of house.
(NE 26-17-2-W5)

LATITUDE: 50^0 27' 50" LONGITUDE: 114^0 10' 10"

STATION CATEGORY: Non-Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1988; 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Periodic measurements on request of WRM (Calgary).

Date	Temp^{0}C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 15	7.0	9.0	13.5	4.37	0.593	2.59	
Aug 07			12.1	2.95	0.226	0.665	
Sep 27	18.0	12.0	2.6	0.26	0.369	0.096	
Oct 30	10.0	4.0	2.7	0.31	0.616	0.191	

STATION NAME: PEKISKO CREEK BELOW CONFLUENCE WITH STIMSON CREEK NUMBER: 05BL921

LOCATION: At bridge below confluence on road West of Secondary Highway #540, 3 km North of Pekisko. (NE 25-17-2-W5)

LATITUDE: 50° 27' 50" LONGITUDE: 114° 09' 55"

STATION CATEGORY: Non-Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Measured bi-weekly for WRM (Calgary) May - Oct.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 01	10.0	10.0	11.5	3.08	0.562	1.73	
May 15	5.0	9.0	12.0	4.22	0.791	3.34	
May 23	18.0	14.0	11.5	4.33	0.760	3.29	
Jul 12	28.0	26.0	13.5	3.22	0.263	0.848	
Aug 07			14.0	3.35	0.276	0.925	
Aug 21	21.0	19.0	12.0	3.98	0.312	1.24	
Sep 05	23.0	14.0	10.4	2.78	0.151	0.422	
Sep 27	14.0	10.0	9.4	2.10	0.102	0.214	
Oct 10	0.5	3.5	14.0	2.97	0.168	0.499	
Oct 18	8.0	1.0	10.0	2.78	0.140	0.388	
Oct 30	10.0	3.0	5.6	1.32	0.226	0.298	

STATION NAME: PELICAN RIVER NEAR THE MOUTH NUMBER: 07CB903

LOCATION: Approximately 500 m upstream of confluence with Athabasca River.

LATITUDE: 55° 50' 00" LONGITUDE: 112° 39' 27"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 07	8.0	0.0	14.0	3.77	0.199	0.750	B

B - Ice Conditons

STATION NAME: PEMBINA RIVER NEAR BELVEDERE NUMBER: 07BB912

LOCATION: At Belvedere Bridge 13 km South of Barrhead on Highway #33.
(SE 10-58-3-W5)

LATITUDE: 53° 59' 38" LONGITUDE: 114° 21' 25"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1980, 1982, 1986, 1989 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Measurements conducted at high flows only (when requested by A.R.F.C.).

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 15	23.0	14.0	86	366	1.262	462	

STATION NAME: PEMBINA RIVER AT ROSSINGTON NUMBER: 07BC904

LOCATION: At Rossington Bridge, Highway #18 (NE 9-60-1-W5)

LATITUDE: 54° 10' LONGITUDE: 114° 06'

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Measurements conducted at high flows only (when requested by A.R.F.C.)

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 15	27.0	13.0	101.4	232	1.884	437	

STATION NAME: PIPESTONE CREEK BELOW COAL LAKE NUMBER: 05FA920

LOCATION: 10.4 km East of Wetaskiwin at old Highway #13 bridge.
(SW 25-46-23-W4)

LATITUDE: 52° 59' 32" LONGITUDE: 113° 12' 42"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1983, 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	0.0	1.0	16.7	36.0	0.470	16.8	
May 22	18.0	13.0	9.6	4.75	0.209	0.958	
Aug 27	20.0	16.0	5.8	1.39	0.230	0.319	
Oct 09	10.0	5.0				0.002	E

E - Estimate

STATION NAME: PRAIRIE RIVER NEAR LAKE CLAIRE NUMBER: 07KF014

LOCATION: Approximately 34.0 km Southwest of Fort Chipewyan.

LATITUDE: 58° 37' 25" LONGITUDE: 111° 40' 50"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1967 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 31	15.0	14.0	96.5	350	0.329	115	
Jun 14	17.0	15.0	100	372	0.131	48.6	
Jul 10	23.0	18.0	104	391	0.104	39.6	
Jul 19	24.0	15.0	102	391	0.312	122	
Aug 02	21.0	16.0	104	394	0.767	302	
Aug 15	20.0	17.0	100	358	0.194	69.3	
Aug 30	20.0	16.0	96.0	355	154	54.8	
Sep 13	12.0	10.0	96.0	341	0.237	80.9	
Sep 26	7.0	9.0	94.0	333	0.595	198	

STATION NAME: PUSKWASKAU RIVER ABOVE SMOKY RIVER CONFLUENCE NEAR PEORIA NUMBER: 07GJ907

LOCATION: From Peoria, 18 km South-southeast to mouth of river; 20 km Northeast of Teepee Creek (NE 12-75-02-W6)

LATITUDE: 55° 29' LONGITUDE: 118° 09'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 07	1.0	0.0	4.2	0.768	0.473	0.341	Estimated from spot velocities, B

B = ice conditions

STATION NAME: REVILLON COUPE AT THE WEIR NUMBER: 07NA901

LOCATION: On Revillon Coupe at the weir, North of Fort Chipewyan.

LATITUDE: 58° 53' 50" LONGITUDE: 111° 24' 00"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1976 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace Athabasca Delta Station

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 21	-21.0	0.0	77.0	551	0.074	40.5	
Mar 20	-15.0	0.0	79.0	526	0.046	24.1	

STATION NAME: REVILLON COUPE BELOW RIVIERE DES ROCHERS NUMBER: 07NA004

LOCATION: 17.7 km Northwest of Fort Chipewyan

LATITUDE: 58° 51' 10" LONGITUDE: 111° 16' 10"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km²

PERIOD OF RECORD: 1971 - 1990

STAGE DISCHARGE CURVE: None

REMARKS: Peace - Athabasca Delta Station

Date 1990	Temp°C Air	Temp°C Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
May 29	16.0	12.0	108	265	0.227	60.1	Flows towards Peace River
Jun 13	15.0	14.0	108	296	0.295	87.4	Flows towards Riviere Des Rochers
Jul 05	20.0	17.0	109	314	0.338	106	Flows towards Peace River
Jul 18	15.0	15.0	110	309	0.414	128	Flows towards Peace River
Aug 01	21.0	17.0	109	267	0.223	59.4	Flows towards Peace River
Aug 14	20.0	18.0	109	276	0.370	102	Flows towards Peace River
Aug 28	19.0	16.0	108	271	0.326	88.3	Flows towards Peace River
Sep 25	13.0	10.0	107	234	0.302	70.6	Flows towards Peace River

STATION NAME: RIBSTONE CREEK NEAR THE MOUTH NUMBER: 05FD905

LOCATION: 48.6 km East of Wainwright on Highway #14. (SW 5-45-1-W4)

LATITUDE: 52° 50' 48" LONGITUDE: 110° 07' 21"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 10	1.0	0.0	4.9	2.80	0.057	0.160	B
May 30	18.0	18.0	11.2	5.34	0.258	1.38	
Aug 30	18.0	16.0	2.8	0.66	0.282	0.186	
Oct 11	4.0	4.0	0.8	0.07	0.114	0.008	

B - Ice Conditions

STATION NAME: RICHARDSON RIVER AT THE WINTER ROAD CROSSING NUMBER: 07DD903

LOCATION: Located on the Richardson River at the winter road crossing, 4.8 km Southwest of Barber Lake. (NE 28-104-6-W4)

LATITUDE: 58° 03' 31" LONGITUDE: 110° 55' 36"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 21	-16.0	0.0	20.0	21.6	0.671	14.5	B

B - Ice Conditions

STATION NAME: RIVIERE DES ROCHERS BELOW REVILLON COUPE NUMBER: 07NA902

LOCATION: Located approximately 19 air km northwest of Fort Chipewyan on Rivere Des Rochers.

LATITUDE: 58° 53' LONGITUDE: 111° 12'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Peace - Athabasca Delta Station

Date 1990	Temp°C Air	Temp°C Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
Jan 17	-20.0	0.0	515	2410	0.448	1080*	
Feb 21	-26.0	0.0	510	2160	0.447	965*	
Mar 20	-15.0	0.0	515	1840	0.405	745*	
May 29	16.0	12.0	179	2860	0.507	1450	
Jun 13	15.0	14.0	182	2890	0.460	1330	
Jul 05	22.0	18.0	176	2970	0.646	1920	
Jul 18	15.0	15.0	184	2960	0.672	1990	
Aug 01	20.0	17.0	183	2960	0.605	1790	
Aug 14	18.0	17.0	181	3020	0.679	2050	
Aug 28	19.0	15.0	182	2930	0.631	1850	
Sep 25	12.0	10.0	179	2890	0.516	1490	
Dec 05	-10.0	0.0	510	2150	0.438	941*	

* Denotes at winter road crossing

STATION NAME: RIVIERE QUI BARRE CREEK NEAR RIVIERE QUI BARRE NUMBER: 05EA916

LOCATION: 3.2 km West of Riviere Qui Barre (NE 23-55-27-W4)

LATITUDE: 53° 46' 16" LONGITUDE: 113° 54' 17"

STATION CATEGORY: Non recording DRAINAGE AREA: 184.3 km^2

PERIOD OF RECORD: 1962 - 1990

STAGE DISCHARGE CURVE: Poor - Due to beaver activity

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 16	2.0[E]	0.0[E]	6.3	1.98	0.190	0.377	B
Mar 29	8.0	2.0	7.2	5.14	0.261	1.34	B
Mar 30	10.0[E]	0.5[E]	7.4	3.68	0.366	1.35	B
Apr 03	4.0[E]	0.5[E]	7.2	2.82	0.479	1.35	B
Apr 11	5.0	2.0	5.6	0.75	0.245	0.184	B
Apr 18	14.0	6.0	5.8	0.68	0.119	0.081	
Apr 25	9.0	9.0	7.0	1.98	0.289	0.572	
May 16	12.0	10.0	4.3	1.55	0.178	0.275	
Jun 19	23.0	18.0				0.000	
Aug 08	24.0	15.0				0.000	
Sep 04	16.0[E]	12.0[E]				0.000	
Sep 24	22.0	10.0				0.000	
Oct 19						0.000	
Oct 29	4.0	0.5				0.000	

STATION NAME: ROSEBUD CREEK AT HIGHWAY #21 NUMBER: 05CE907

LOCATION: 7.8 km South on Highway #21 from junction Highways #9 & #21.
(SE 24-27-24-W4)

LATITUDE: 51° 18' 57" LONGITUDE: 113° 14' 29"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	8.0	3.0	7.4	1.85	0.648	1.20	HWM = 0.820
Apr 04	3.0	5.0	7.5	2.20	0.550	1.21	
Apr 06	8.0	6.0	7.5	1.89	0.416	0.786	
Apr 10	-1.0	2.0	7.5	1.70	0.357	0.607	
Apr 24	13.0	10.0	7.5	1.09	0.224	0.244	
May 29	18.0	15.0	7.5	2.74	0.646	1.77	
Jun 11	12.0	15.0	7.7	3.67	0.946	3.47	HWM = 1.040
Jul 09	29.0	22.0	7.3	1.98	0.985	1.95	
Aug 13	27.0	25.0	7.5	2.14	0.372	0.797	W
Sep 12	17.0	17.0	7.6	1.69	0.201	0.340	W
Oct 02	8.0	10.0	4.2	0.60	0.106	0.063	W
Oct 31	1.0	3.0	4.4	0.78	0.076	0.059	W

W - Weeds

STATION NAME: ROSS CREEK AT OUTLET OF ELKWATER LAKE NUMBER: 05AH046

LOCATION: 1.6 km North of junction of Elkwater town road and Highway #41 to Texas Gate, then 0.2 km West. (NW 25-8-3-W4)

LATITUDE: 49° 40' 42" LONGITUDE: 110° 17' 42"

STATION CATEGORY: Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 90

STAGE DISCHARGE CURVE: Yes - Old W.S.C. Curve

REMARKS: D & O request measurements when releasing from lake - 2 to 3 weeks every fall (Oct - Nov).

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Oct 18			7.7	2.51	0.218	0.546	Weeds
Oct 19			7.7	2.04	0.194	0.396	
Oct 19			7.6	2.04	0.200	0.409	
Oct 22			7.5	1.61	0.176	0.283	
Oct 30						0.000	

STATION NAME: SADDLE RIVER SLIDE AT DAM SITE NEAR WANHAM NUMBER: 07FD932

LOCATION: From Highway #2, 8 km East on Highway #49, 3.2 km North, 6.4 km East, East-northeast through field to slide area.

LATITUDE: 55° 47' 12" LONGITUDE: 118° 26' 08"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Saddle (Burnt) River blocked by ~78 acre slump following ~140 mm of rain June 10-13, 1990. Station established to monitor condition of dam and growing reservoir. Requested by Water Resources Administration Division. In 1991, emphasis will change from monitoring outflow discharge to monitoring reservoir water level.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 24						0.000	Water ponding behind dam. ~4.2 m to top
Jul 25	11.0					0.000	WL rising
Sep 10	17.0					0.000	Suspect water seeping through dam.

STATION NAME: SERVICEBERRY CREEK AT HIGHWAY #21 NUMBER: 05CE908

LOCATION: 24.1 km South on Highway #21 from Junctions Highways #9 and #21 (SW 35-25-24-W4)

LATITUDE: 51° 10' 26" LONGITUDE: 113° 15' 27"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	8.0	3.0	3.9	1.88	0.164	0.308	B
Apr 04	1.0	5.0	5.6	2.01	0.118	0.236	
Apr 06	8.0	6.0	5.4	1.87	0.104	0.195	
Apr 10	-1.0	2.0	5.2	1.73	0.090	0.155	
Apr 24	13.0	8.0	1.7	0.20	0.445	0.089	
May 29	14.0	14.0	7.8	4.22	0.422	1.78	HWM = 0.752
Jun 11	11.0	15.0	6.9	3.25	0.372	1.21	
Jul 09	29.0	24.0	7.0	3.25	0.406	1.32	
Aug 13	28.0	22.0	6.5	3.40	0.394	1.34	
Sep 12	18.0	16.0	6.0	2.95	0.289	0.853	
Oct 02	12.0	10.0	8.4	3.84	0.391	1.50	
Oct 31	5.0	2.0	4.1	0.77	0.065	0.050	

B - Ice Conditons

STATION NAME: SMOKY RIVER ABOVE CONFLUENCE WITH WAPITI RIVER NUMBER: 07GB902

LOCATION: From Bezanson, 3.2 km East, 6.4 km South, 1.6 km East, 1.6 km South, 3.5 km Southeast to Wapiti River, and approx. 0.7 km East and South by river to site. (NW 07-71-02-W6)

LATITUDE: 55° 08' LONGITUDE: 114° 18'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Environmental Assessment Division

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 01	8.0	0.0	60.0	50.8	0.487	24.7	B

B = ice conditions

STATION NAME: SMOKY RIVER NEAR BEZANSON NUMBER: 07GJ908

LOCATION: From Secondary #733 near Bezanson, ~9 km East on Highway #34 to bridge over Smoky River. (NE 17-72-02-W6)

LATITUDE: 55° 14' LONGITUDE: 118° 15'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Alberta Research Council. Station also served as site to observe flood waters of June 1990 event.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 12	-25.0	0.0	176.0	112.3	0.429	48.2	B
Feb 20	-4.0	0.0	178.3	105.7	0.405	42.8	B

B = ice conditions

STATION NAME: SOUNDING CREEK SITE #1 NEAR HANNA NUMBER: 05GA906

LOCATION: 38.4 km North, 11.2 km East of Hanna. (14-35-13-W4)

LATITUDE: 51° 59' 57" LONGITUDE: 111° 45' 23"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	20.0	17.0				0.000	Standing water

STATION NAME: SOUNDING CREEK SITE #2 NEAR HANNA NUMBER: 05GA907

LOCATION: 32.8 km North, 16 km East of Hanna. (30-34-12-W4)

LATITUDE: 51° 56' 43" LONGITUDE: 111° 41' 02"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	17.0	19.0				<0.0005	E, Trace of flow

E - Estimate

STATION NAME: SOUNDING CREEK SITE #3 NEAR HANNA NUMBER: 05GA908

LOCATION: 25.6 km North, 26.4 km East of Hanna. (32-33-11-W4)

LATITUDE: 51° 52' 47" LONGITUDE: 111° 32' 10"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	19.0	14.0				0.006	V, d/s culvert

V = Volumetric

STATION NAME: SOUNDING CREEK SITE #4 NEAR HANNA NUMBER: 05GA909

LOCATION: 21.6 km North, 32 km East of Hanna.

LATITUDE: 51° 50' 36" LONGITUDE: 111° 26' 52"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	19.0	16.0				0.000	Standing water

STATION NAME: SOUNDING CREEK SITE #5 NEAR HANNA **NUMBER:** 05GA910

LOCATION: 16.8 km North, 38.4 km East of Hanna. (3-33-10-W4)

LATITUDE: 51° 47' 59" **LONGITUDE:** 111° 20' 49"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 19	16.0	17.0				0.000	Standing water

STATION NAME: SOUTH HEART RESERVOIR SEEPAGE SITE BELOW SPILLWAY #1 NUMBER: 07BF914

LOCATION: From Secondary #749, 8 km West on Secondary #679, 11 km North on gravel road to South Heart Dams, right to Dam #1 (SE 20-77-17-W5)

LATITUDE: 55° 41' LONGITUDE: 116° 36'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1988 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Development & Operations Division.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jan 11	-10.0	0.0				0.0008	Volumetric, Lake Level = 625.878
Apr 12	0.0	0.5				0.0009	WL = 625.895
Jun 27	18.0	10.5				0.0011	WL = 625.958
Jul 19	14.0	11.0				0.0009	WL = 625.816
Aug 09	30.0	16.0				0.0017	WL = 625.703
Aug 28	18.0	14.0				0.0008	WL = 625.596
Sep 19	14.0	10.0				0.0008	WL = 625.548
Sep 28	11.0	7.0				0.0008	WL = 625.525
Oct 18	6.0	5.0				0.0008	WL = 625.479

STATION NAME: SOUTH HEART RIVER NEAR MULLEN'S FARM NUMBER: 07BF918

LOCATION: Approximately 600 m below Mullen's Farm on South Heart River.
(NE 14-76-15-W5)

LATITUDE: 55° 35' 25" LONGITUDE: 116° 12' 35"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Boat measurement.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 03	11.0	8.0	44.5	42.9	0.712	30.5	

STATION NAME: SOUTH HEART RIVER SITE #8 NEAR BIG PRAIRIE SETTLEMENT NUMBER: 07BF905

LOCATION: Approximately 18 km North on Highway #749 North of High Prairie. Approximately 11 km East, then 1 km East and 1 km East. (SW 17-76-15-W5)

LATITUDE: 55° 35' LONGITUDE: 116° 17'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1983, 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 8	11.0	9.0	30.4	83.2	0.365	30.4	High turbid water

STATION NAME: SPRING CREEK #2 BELOW BERLAND RIVER **NUMBER:** 07AE907

LOCATION: 12 km downstream of Berland River confluence. Measurement done at confluence of the Spring and Athabasca River. (NE 10-59-19-W5)

LATITUDE: 54° 05' 31" **LONGITUDE:** 116° 45' 33"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 16	-27.0	0.0	0.8	0.10	0.198	0.019	B

B - Ice Conditions

STATION NAME: ST. MARY RIVER BELOW ST. MARY DAM **NUMBER:** 05AE908

LOCATION: 3.2 km West of Spring Coulee, North for 4.0 km, 0.4 km below spillway (SE 12-05-24-W4)

LATITUDE: 49° 22' 08" **LONGITUDE:** 113° 06' 05"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1981 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Metered on request of Headworks Branch.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 27			29.0	7.75	0.354	2.74	

STATION NAME: STIMSON CREEK AT HIGHWAY #22 NUMBER: 05BL922

LOCATION: On Highway #22, 3 km South of junction with Secondary Highway #540

LATITUDE: 50° 23' 15" LONGITUDE: 114° 14' 40"

STATION CATEGORY: Non recording DRAINAGE AREA: 264 km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: N/A

REMARKS: Metered bi-weekly for WRM (Calgary) May - Oct.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 01	9.0	10.0	4.6	1.15	0.437	0.503	
May 15	7.0	9.0	5.0	1.60	0.548	0.876	
May 23	17.0	16.0	5.5	1.43	0.543	0.776	
Jun 26	27.0	20.0	4.9	1.40	0.389	0.543	
Jul 12	30.0	27.0	4.6	0.82	0.276	0.226	
Jul 25			4.4	0.87	0.369	0.319	
Aug 07			4.2	0.70	0.290	0.203	
Aug 21			6.2	1.40	0.431	0.597	
Sep 05			4.2	0.68	0.192	0.130	
Sep 27			4.2	0.63	0.159	0.100	
Oct 10	0.5	4.0	5.1	1.07	0.234	0.250	
Oct 18	4.0	0.5	4.4	0.89	0.343	0.305	
Oct 30	11.0	3.0	4.2	0.68	0.238	0.162	

STATION NAME: STURGEON RIVER AT ST. ALBERT **NUMBER:** 05EA002

LOCATION: At Perron St. bridge, in the City of St. Albert. (SW 4-54-25-W4)

LATITUDE: 53° 38' 05" **LONGITUDE:** 113° 37' 33"

STATION CATEGORY: Miscellaneous **DRAINAGE AREA:** 2,650 km^2

PERIOD OF RECORD: 1976 - 1990

STAGE DISCHARGE CURVE: Yes, backwater affected

REMARKS: Operated as a recording station by Environment Canada 1975 - 1986.
Alberta Environment Miscellaneous 1987 - 1990.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 26	-12.0	0.0	20.5	13.3	0.277	3.68	B

B - Ice Conditions

STATION NAME: TAWATINAW RIVER NEAR COLINTON NUMBER: 07BE907

LOCATION: 3.2 km North of Colinton (27-65-22-W4)

LATITUDE: 54° 39' 31" LONGITUDE: 113° 41' 47"

STATION CATEGORY: Non recording DRAINAGE AREA: 776 km^2

PERIOD OF RECORD: 1961 - 1990

STAGE DISCHARGE CURVE: Good, until beavers moved in (1987)

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 02	8.0[E]	0.5[E]	9.5	4.13	0.821	3.39	B
Apr 19	18.0	7.0	9.0	4.46	0.271	1.21	
Jun 19	21.0	19.0	6.3	1.53	0.202	0.309	
Jul 18	17.0	16.0	7.3	3.01	0.375	1.13	

B - Ice Conditions

STATION NAME: TOUGH CREEK NEAR BEAZER NUMBER: 05AE039

LOCATION: 18.5 km West of Cardston on Highway #5, 4.0 km Southeast toward Beazer, 8 km Southwest and 0.5 km South to William's farm. (SW 34-01-27-W4)

LATITUDE: 49° 04' 00" LONGITUDE: 113° 32' 00"

STATION CATEGORY: Recording DRAINAGE AREA: 38.8 km^2

PERIOD OF RECORD: 1969 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Beaver dam diverts some flow around site. New site to be found in 1991. Streamflow data not computed for 1990.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 04	5.0	1.0	7.2	2.08	0.315	0.656	
May 10	7.0	4.0	8.5	2.69	0.483	1.30	
Oct 19						0.020[E]	

E - Estimate

STATION NAME: U.I.D. CANAL REACH #1 @ STATION 12+344 NUMBER: 05AD933

LOCATION: 6.5 km South of Hillspring on Highway #800 and 0.5 km West to U.I.D. Canal. (NW 19-03-27-W4)

LATITUDE: 49^0 13' 50" LONGITUDE: 113^0 37' 30"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: No

REMARKS: Put in to check canal for losses between W.S.C. station and Alberta Environment Station - Requested by Bob Sharp of D & O.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 22						0.000	
Jun 20			4.2	1.04	0.282	0.292	
Jun 28			6.4	3.52	0.588	2.07	
Jul 09			6.4	3.31	0.589	1.95	
Aug 16			7.2	4.81	0.574	2.76	
Sep 04			5.6	2.66	0.488	1.30	
Sep 13			6.0	3.02	0.528	1.59	
Sep 25			5.3	2.47	0.478	1.18	
Oct 11			5.6	2.64	0.508	1.34	

STATION NAME: U.I.D. LATERAL "A" NEAR HEADGATE NUMBER: 05AD922

LOCATION: 5.6 km South of Hillspring and 1.2 km East (NW 29-03-27-W4)

LATITUDE: 49° 14' 45" LONGITUDE: 113° 36' 40"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 20			3.8	1.04	0.239	0.248	
Sep 26			3.2	0.93	0.234	0.218	

STATION NAME: U.I.D. LATERAL "B" NEAR HEADGATE NUMBER: 05AD923

LOCATION: 1.6 km North of Hillspring and 0.2 km West (SW 19-04-27-W4)

LATITUDE: 49° 18' 40" LONGITUDE: 113° 38' 00"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 20			3.4	0.98	0.331	0.324	
Sep 26			3.4	1.13	0.299	0.338	

STATION NAME: U.I.D. MAIN CANAL BELOW HILLSPRING CHUTE NUMBER: 05AD924

LOCATION: 1.2 km North of Hillspring and 0.2 km East (SE 19-4-27-W4)

LATITUDE: 49° 18' 25" LONGITUDE: 113° 37' 20"

STATION CATEGORY: Non recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Monthly measurements for Headworks Branch.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Aug 20			6.2	3.79	0.581	2.20	
Sep 26			4.8	1.34	0.387	0.518	

STATION NAME: VERMILION RIVER NEAR THE MOUTH NUMBER: 05EE926

LOCATION: 36.2 km North of Kitscoty. (NE 11-54-3-W4)

LATITUDE: 53° 39' 18" LONGITUDE: 110° 19' 38"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: None

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 11		0.0	12.5	2.19	0.082	0.180	B

B - Ice Conditions

STATION NAME: WABAMUN LAKE OUTLET NUMBER: 05DE908

LOCATION: 5 km South of Highway #16 on the road to the Sundance Power Plant, turn West on gravel road then left on the small trail just after crossing the railway tracks. (SE 36-52-4-W5)

LATITUDE: 53° 31' 58" LONGITUDE: 114° 26' 30"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1990

STAGE DISCHARGE CURVE: Yes

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jun 11	15.0	17.0	5.2	2.62	0.206	0.573	
Jun 18	24.0	24.0	8.8	0.87	0.500	0.434	
Jun 26	25.0	23.0	5.4	2.86	0.134	0.383	
Jun 26	25.0	23.0	9.1	0.91	0.420	0.383	
Jul 05			10.5	2.14	0.216	0.462	
Jul 12			9.8	2.13	0.335	0.714	
Jul 17			10.6	2.12	0.318	0.675	
Jul 25	21.0	23.0	10.4	1.80	0.194	0.350	
Aug 01	22.0	20.0	10.0	1.67	0.031	0.051	
Aug 08	22.0	23.0	9.6	1.23	0.008	0.010	
Aug 15	18.0	19.0	9.0	0.92	0.016	0.014	
Aug 21	27.0	22.0	9.3	1.07	0.039	0.042	

STATION NAME: WABAMUN LAKE OUTLET NUMBER: 05DE908

Date 1990	Temp°C Air	Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
Aug 29	17.0	17.0			0.000	0.000	
Sep 05	15.0	15.0			0.000	0.000	
Oct 15	5.0	6.0	5.0	0.07	0.250	0.019	

STATION NAME: WABASH CREEK TRIBUTARY NEAR WESTLOCK NUMBER: 07BC902

LOCATION: On Highway #44, 4.8 km North of Westlock (17-60-26-W4)

LATITUDE: 54° 11' 22" LONGITUDE: 113° 50' 59"

STATION CATEGORY: Non recording DRAINAGE AREA: 65.3 km^2

PERIOD OF RECORD: 1965 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 27	9.0	1.0	3.6	0.95	0.326	0.310	B
Mar 29	8.0	2.0	3.6	1.08	0.700	0.755	
Mar 30	10.0[E]	1.0[E]	5.8	3.01	0.219	0.660	
Apr 03	6.0[E]	1.0[E]	1.6	0.21	0.440	0.093	B
Aug 08	26.0	18.0				0.000	
Oct 29						0.000	

E - Estimate

B - Ice Conditions

STATION NAME: WATERTON RIVER BELOW WATERTON DAM AT TUNNEL NUMBER: 05AD930

LOCATION: 2.5 km North of Hillspring and 3.2 km West on Highway #505 (SEC 26-4-28-W4)

LATITUDE: 49° 19' 45" LONGITUDE: 113° 39' 50"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1986 - 1990

STAGE DISCHARGE CURVE: Yes

REMARKS: Metered on request for Headworks Branch.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 20			12.0	4.22	0.495	2.09	

STATION NAME: WEST CASTLE RIVER AT FORESTRY ROAD BRIDGE (SITE #1) NUMBER: 05AA915

LOCATION: 16 km West of Pincher Creek on Highway #507 and 26 km southwest on Highway #774 to river crossing by ski area. (NE 24-4-4-W5)

LATITUDE: 49° 19' 05" LONGITUDE: 114° 24' 40"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Alberta Tourism

Date 1990	Temp°C Air	Temp°C Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
Jan 04			8.0	1.75	0.162	0.283	
Jan 18			4.4	1.21	0.147	0.178	
Feb 09			3.4	0.48	0.100	0.048	
Feb 22			4.6	0.66	0.036	0.024	
Mar 08						0.010[5]	
Mar 23						0.010[5]	
Apr 25			13.0	7.20	0.965	6.95	
May 15			13.0	5.56	0.854	4.75	

STATION NAME: WEST CASTLE RIVER DOWNSTREAM OF FORESTRY ROAD BRIDGE (SITE #2) NUMBER: 05AA916

LOCATION: 16 km West of Pincher Creek on Highway #507 and 24.5 km on Highway #774 and East of highway, 0.25 km on trail to river (SE 36-4-4-W5)

LATITUDE: 49° 20' 20" LONGITUDE: 114° 24' 40"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Alberta Tourism

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jan 04			9.5	2.29	0.305	0.699	
Jan 18			8.2	3.09	0.189	0.584	
Feb 09			7.5	1.73	0.231	0.400	
Feb 22			7.6	1.29	0.321	0.414	
Mar 08			8.5	2.29	0.192	0.439	B
Mar 23			8.5	2.25	0.192	0.431	B
Apr 25			21.0	9.14	0.864	7.90	
May 15			20.0	7.27	0.739	5.37	

B - Ice Conditions

STATION NAME: WHITE EARTH CREEK ABOVE EDWAND CREEK **NUMBER:** 05BC916

LOCATION: 26 km east, 0.2 km North of Smoky Lake (NW 22-59-16-W4).

LATITUDE: 54° 07' 13" **LONGITUDE:** 112° 19' 31"

STATION CATEGORY: Recording **DRAINAGE AREA:** N/A km^2

PERIOD OF RECORD: 1988 - 1990

STAGE DISCHARGE CURVE: Poor; Beaver activity

REMARKS: Operated as a recording station; not published by Environment Canada.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Mar 27	12.0	0.0				0.000	B
Apr 06	6.0[E]	0.5[E]	7.2	4.87	0.413	2.01	B
Apr 12	8.0	3.0	8.5	8.91	0.328	2.92	
Apr 17	9.0	3.0	8.5	6.13	0.201	1.23	
Apr 20	16.5	11.0	8.5	5.57	0.187	1.04	
Apr 24	8.5	10.0	8.5	6.92	0.221	1.53	
May 18	18.0	14.0	7.9	5.17	0.065	0.337	
Jun 20	24.0	19.0				0.000	
Jul 17	13.0	17.0	9.1	3.34	0.029	0.097	
Aug 10	25.0	15.0				0.000	
Sep 06	19.0	14.5				0.000	
Sep 25	21.0	13.5				0.000	
Oct 04	4.0	6.0				0.000	
Oct 30	5.5	0.5				0.005	Estimate

STATION NAME: WHITEHORSE CREEK NEAR CADOMIN NUMBER: 07AF910

LOCATION: Approximately 8 km South of junction Cadomin Road and Highway #40.
(NE 24-46-24-W5)

LATITUDE: 52° 59' 00" LONGITUDE: 117° 20' 40"

STATION CATEGORY: Recording 1985 - 1989 DRAINAGE AREA: 114 km^2
Non Recording 1990

PERIOD OF RECORD: 1985 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS: Previously published by Environment Canada.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 05						0.300	B
Apr 18	17.0	4.0	7.2	0.81	0.510	0.413	B
Apr 20	15.0	6.0	8.2	1.00	0.514	0.513	B
Apr 24	7.0	7.0	8.8	1.12	0.508	0.569	B
Apr 27	3.0	4.0	8.5	1.10	0.538	0.594	B
May 02	4.0	5.0	8.2	1.18	0.414	0.490	
May 15	10.0	11.0	5.3	0.90	0.949	0.850	
May 31	19.0	8.0	11.5	8.66	2.232	19.3	
Jun 01	11.0	5.0	11.5	10.8	2.759	29.8	
Jun 05	7.0	6.0	11.3	6.25	1.522	9.44	
Jun 13	11.0	5.0	11.0	6.74	1.36	9.16	
Jun 19	12.0	6.0	11.0	8.10	1.890	15.3	

STATION NAME: WHITEHORSE CREEK NEAR CADOMIN NUMBER: 07AF910

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Jul 04			12.8	5.83	0.916	5.34	
Jul 26	12.0	8.5	10.8	4.01	0.594	2.38	
Aug 20	26.0	16.0	9.2	1.64	0.738	1.21	
Sep 10	26.0	12.5	6.0	2.03	0.636	1.29	
Sep 25	7.0	5.0	6.4	2.29	0.686	1.57	
Oct 16	2.5	3.0	9.4	2.20	0.309	0.679	B
Nov 01	2.0	2.0	5.4	0.98	0.499	0.489	B

B - Ice Conditions

STATION NAME: WHITFORD CREEK NEAR MUNDARE NUMBER: 05EC907

LOCATION: 2.7 km North and 4.8 km West of Mundare (01-56-17-W4)

LATITUDE: 53° 48' 14" LONGITUDE: 112° 24' 19"

STATION CATEGORY: Non recording DRAINAGE AREA: 117 km^2

PERIOD OF RECORD: 1962 - 1990

STAGE DISCHARGE CURVE: Good in Low Flow Range

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 06	4.0[E]	1.0[E]	4.4	1.84	0.592	1.09	
Apr 17	7.0	4.0	3.3	0.96	0.217	0.209	
Jul 17	11.0	16.0				0.000	

E - Estimate

STATION NAME: WILLOW CREEK NEAR GRANUM NUMBER: 05AB906

LOCATION: 1 km West of Highway #2 on Highway #519, on right bank 200 m downstream of bridge (NW 36-10-27-W4)

LATITUDE: 49° 52' 25" LONGITUDE: 113° 32' 50"

STATION CATEGORY: Recording DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1989 - 1990

STAGE DISCHARGE CURVE: Nil

REMARKS: Requested by W.R.A. Division for water level only. Discharge data not computed.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
May 0 2			18.0	4.70	0.313	1.47	
Jul 12			16.5	4.23	0.433	1.83	

STATION NAME: WINAGAMI - GIROUXVILLE CANAL AT TURN-OUT STRUCTURE NUMBER: 07BF913

LOCATION: From McLennan, 2.5 km South, or from Secondary #679, 10.0 km North on Highway #49. (NW 22-77-19-W5)

LATITUDE: 55° 41' LONGITUDE: 116° 52'

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1988 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Requested by Development & Operations Division. Measurements monitor flow into Kimiwan Lake.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 12			2.30	0.363	2.218	0.805	Wading
May 02	14.0	8.0				0.035	Estimate
Jun 27	16.0	16.5				0.210	Estimate
Jul 17	12.0	11.0	2.00	0.147	0.516	0.076	Wading
Jul 26	20.0		2.00	0.161	0.538	0.087	Wading
Aug 09	18.0	19.0	1.70	0.134	0.231	0.031	Wading
Aug 15	15.0	15.0				0.010	Estimate, Gate Closed
Aug 28	16.0	13.0				0.008	Estimate
Sep 19	14.0	12.0				0.015	Estimate
Sep 28	8.0	7.0				0.020	Estimate
Oct 17	2.0	2.0				0.018	Estimate

STATION NAME: WINDFALL CREEK NEAR THE MOUTH NUMBER: 07AE906

LOCATION: Approximately 4 km North of Windfall Junction, west of Whitecourt. (NW 29-60-15-W5)

LATITUDE: 54° 13' 10" LONGITUDE: 116° 12' 56"

STATION CATEGORY: Miscellaneous DRAINAGE AREA: N/A km^2

PERIOD OF RECORD: 1988 - 1990

STAGE DISCHARGE CURVE: No

REMARKS: Fly-in site. Part of Athabasca River Water Quality Study.

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Feb 20	10.0	0.0	8.5	4.68	0.196	0.919	B

B - Ice Conditions

STATION NAME: WOLF CREEK NEAR CRAIGMYLE **NUMBER:** 05CF902

LOCATION: 4.8 km North and 3.2 km East of Craigmyle (3-32-16-W4)

LATITUDE: 51° 42' 58" **LONGITUDE:** 112° 11' 50"

STATION CATEGORY: Non recording **DRAINAGE AREA:** 305 km^2

PERIOD OF RECORD: 1969 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS: Very little data 1969 - 1980

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 03	3.0	4.0	2.8	1.28	0.222	0.285	HWM = 28.366
Apr 04	4.0	6.0	3.1	0.77	0.268	0.206	
Apr 06	9.0	5.0	2.4	1.12	0.110	0.123	
Apr 19						0.001	E
May 29						0.000	Dry
Jul 19						0.000	Dry
Aug 15						0.000	Dry

STATION NAME: WOLF CREEK NEAR PONOKA NUMBER: 05FA913

LOCATION: On West Matejka Road 4 km South and 3.6 km West of Ponoka (23-42-26-W4)

LATITUDE: 52° 38' 09" LONGITUDE: 113° 37' 46"

STATION CATEGORY: Non recording DRAINAGE AREA: 514 km²

PERIOD OF RECORD: 1962 - 1990

STAGE DISCHARGE CURVE: Good

REMARKS:

Date	Temp°C		Width	Area	Mean Velocity	Discharge	Remarks
1990	Air	Water	m	m^2	m/s	m^3/s	
Apr 02	13.0	3.0	18.0	34.4	0.164	5.65	
Apr 04	6.0	2.0	18.0	34.7	0.111	3.85	
Apr 11	9.0	3.0	10.5	6.03	0.092	0.557	
Apr 17	9.0	6.0	9.5	4.63	0.086	0.399	
Apr 24	12.0	8.0	11.5	5.03	0.172	0.866	
May 22	18.0	12.0	6.1	3.46	0.118	0.408	
Jun 06	17.0	12.0	15.5	28.9	0.108	3.12	
Jun 11	12.0	15.0	14.5	7.83	0.172	1.35	
Jun 13	15.0	11.0	16.5	30.0	0.151	4.53	
Jun 15	18.0	12.0	16.5	31.9	0.281	8.95	
Jun 18	20.0	20.0	16.5	30.2	0.172	5.20	
Jul 05	24.0	18.0	16.5	32.6	0.331	10.8	
Jul 11	24.0	19.0	12.0	13.2	0.217	2.87	

STATION NAME: WOLF CREEK NEAR PONOKA NUMBER: 05FA913

Date 1990	Temp°C Air	Temp°C Water	Width m	Area m^2	Mean Velocity m/s	Discharge m^3/s	Remarks
Aug 10	21.0	17.0	5.2	1.15	0.221	0.255	
Aug 27	20.0	14.0	3.0	0.23	0.235	0.054	
Sep 20	12.0	11.0	1.4	0.10	0.170	0.017	
Oct 09	18.0	5.0	2.8	0.27	0.167	0.045	
Nov 01	4.0	2.0	2.8	0.25	0.188	0.047	